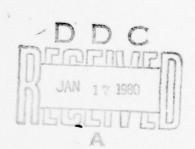


# RELATIONSHIP BETWEEN PERCEPTIONS OF ROLE STRESS AND INDIVIDUAL, ORGANIZATIONAL, AND ENVIRONMENTAL VARIABLES

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hierarchical levels at four Public Works Centers (PWCs) in the U.S. (including Pearl Harbor), the PWC in Yokosuka, Japan; and the PWC at Subic Bay, Philippines.

Results revealed that (1) workers perceived more role ambiguity than supervisory personnel; (2) perceptions of role stress differed across cultures, but differences were not related to specific cultural values; (3) role stress was related to organizational climate, job characteristics, and managerial and supervisory practices; (4) role ambiguity was more strongly related to organizational climate and general job characteristics, whereas role conflict was more strongly related to specific job characteristics; (5) role ambiguity, unlike role conflict, was a substantial contributor in predicting intrinsic satisfaction; and (6) role ambiguity was related to workers perceptions of work center performance.

#### **FOREWORD**

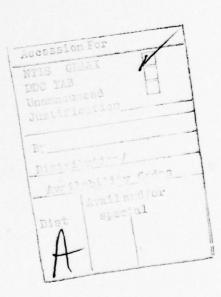
This research and development was conducted for the Naval Facilities Engineering Command in support of Exploratory Development Task Area ZF55.521.034 (Civilian Personnel Research and Development), Work Unit 03.02 (Evaluation of Civilian Personnel Management). The objective of this work unit is to identify and evaluate the managerial practices used in Navy organizations staffed primarily with civilians. The purpose of this study, which was conducted at six of the Navy's Public Works Centers (PWCs), was to determine how Navy civilian employees' perceptions of various aspects of the work environment differ across cultural and ethnic groups and across hierarchical levels. A better understanding of these differences should enable Navy planners and policymakers to improve civilian personnel management.

This is the second report published concerning this study. The first (TR 79-9) described the interrelationships between cultural and work-related values and attitudes with respect to organizational functioning. This report addresses the relationships between employee perceptions of role stress and individual, organizational, and environmental variables. The third report in the series will address the relationships between managerial practices and organizational outcome variables, and the fourth (and final) will provide an executive summary of the previous findings.

Although results of this report are primarily intended for use by the Navy Facilities Engineering Command, they may be generalizable to other shore support activities. Also, they should be of interest to researchers studying role stress.

Appreciation is extended to the commanding officers of the PWCs and their staffs, for their general support and cooperation.

DONALD F. PARKER Commanding Officer



#### SUMMARY

## Problem

Because of the high cost of human resources, increasing pressure has been placed on Navy planners and policy makers to reduce manpower costs without undermining the Navy's goals and operational requirements. Thus, one of the major challenges facing the Navy today is to provide for more effective personnel management. Results of research conducted within the private sector indicated that role stress had adverse effects on organizational functioning as well as on employee satisfaction, performance, and retention. In light of these findings, studying role stress among Navy civilian employees and defining its relationship to individual, organizational, and environmental variables should provide clues for improving personnel management.

## Purpose

The purpose of this study was to determine (1) whether perceptions of role stress differ across hierarchical levels within organizations, (2) whether type and degree of perceived role stress differ across cultural settings, (3) how role stress relates to personal and work values, (4) how role stress relates to various organizational variables (e.g., organizational climate, managerial practices, characteristics of supervision, and job characteristics), and (5) whether role ambiguity and role conflict relate differently to job satisfaction and performance across levels.

## Approach

Although the Navy's Public Works Centers (PWCs) are similar as to tasking, technology used, organizational structure, and managerial background, they differ as to the surrounding physical and social environments as well as in the ethnic and cultural composition of the labor force and supervisors. Thus, they were chosen as a logical environment in which to conduct this study.

Two questionnaire forms were designed--one for the workers and the other for the managers/supervisors. The forms included items designed to measure role stress, cultural and work values, organizational climate, job characteristics, supervisory influence, perceptions of supervisors, managerial practices, job statisfaction, and work center effectiveness. Questionnaires were administered to a sample of 1607 employees drawn from all hierarchical levels at six PWCs--four in the United States (including PWC Pearl Harbor); one at Subic Bay, Philippines; and one at Yokosuka, Japan. Results were analyzed to determine relationships among the two measures of role stress--role ambiguity and role conflict--and various organizational/environmental variables. Role ambiguity occurs when an individual is not sure of what is expected of him because of unclear or vague directions; and role conflict, when he has demands made of him that are incompatible with his role or values.

#### Results and Conclusions

- 1. Moderate amounts of both role ambiguity and role conflict were reported by employees at all hierarchical levels and at all center locations. In contrast to previous findings, however, workers reported more role ambiguity than supervisory personnel.
- 2. Although perceptions of role ambiguity and role conflict differed across hierarchical levels and center locations, these differences were not related to cultural or job values.

- 3. Perceptions of role ambiguity and role conflict were related to organizational climate, job characteristics, and supervisory practices. Role ambiguity, however, was more strongly related to organizational climate and general job characteristics; and role conflict, to specific job characteristics.
- 4. The best predictors of role ambiguity for workers were perceptions of job challenge and, for supervisors, perceptions of openness in organizational climate. The best predictors of role conflict for workers were perceptions of organizational problems and, for supervisors, perceptions of esprit de corps.
- 5. For both workers and supervisors, the best predictors of intrinsic satisfaction were perceptions of esprit de corps and role ambiguity; and the best predictors of work center performance, openness in organizational climate.

## Recommendations

- 1. Workers at the Public Works Centers (PWCs) expressed more role ambiguity than did those in supervisory and managerial positions. Therefore, they should be provided with accurate and timely information concerning their work and supervisors should provide sufficient guidelines for successful job completion.
- 2. In general, managers expressed more role conflict than workers, which may be because of time pressures to complete work. Since these pressures are increased when coordination problems lead to manpower waste, material problems, and planning or scheduling difficulties, steps should be taken to ensure the accuracy of inputs to the control system, which is responsible for disseminating planning and scheduling reports.
- 3. Workers who perceive their supervisor as more competent, more supportive, and less biased experience less role stress. Thus, to ensure that supervisors have these qualities, selection criteria for supervisors should be revised to include interpersonal skills; supervisory training should be provided to improve existing technical, managerial, and interpersonal competence; and performance standards established for supervisors should be expanded to include personnel management responsibilities.
- 4. Perceptions of role ambiguity were related to organizational climate (e.g., openness) and to general job characteristics (e.g., reward contingencies). Thus, the timing and form of communication provided by the control system should be improved to ensure that (a) employees perceive supervisors as willing to provide and receive information and (b) employees receive accurate feedback about their performance.
- 5. Since role stress was related to supervisors' perceptions of managerial practices (e.g., flow of communication, derogation of workers, and bypassing of supervision), managers should be made aware of the possible effect of their policies and procedures on worker attitudes and performance.
- 6. To ensure that supervisors have realistic expectations concerning their influence, the amount of such influence appropriate for different tasks should be clearly defined.

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#### INTRODUCTION

## Problem

Because of the high cost of human resources, increasing pressure has been placed on Navy planners and policy makers to reduce manpower costs without undermining the Navy's goals and operational requirements. Thus, one of the major challenges facing the Navy today is to provide for more effective personnel management.

Results of research conducted within the private sector (e.g., Kahn, Wolfe, Quinn, Shoek, & Rosenthal, 1964) indicate that role stress has adverse effects on organizational functioning as well as on employee satisfaction, performance, and retention. In light of these findings, studying role stress among Navy civilian employees and defining its relationship to individual, organizational, and environmental variables should provide clues for improving personnel management.

## Background

## **Effects of Role Stress**

Rizzo, House, and Lirtzman (1970) conceptualized role stress as being composed of two components--role conflict and role ambiguity. Role conflict results when an individual has demands made of him that are incompatible with his role or values; and role ambiguity, when he is not sure of what is expected of him because of unclear or vague directions. Kahn et al. (1964) surveyed a national sample of male employees and found that 35 percent had no clear idea of the scope or responsibility of their job. Also, they found that high levels of role conflict and role ambiguity were related to low degrees of job satisfaction and confidence in the organization, and to a high degree of job-related tension. Greene and Organ (1973) reported significant negative relationships between role conflict, role ambiguity, and ratings of employee performance. This is consistent with Johnson and Graen (1973), who found that employees who had left the organization tended to report higher levels of supervisor ambiguity and higher levels of role conflict while at their job than did those still working within the organization.

Investigators also have studied the differential effects of role ambiguity and role conflict. Rizzo et al. (1970) found that individuals who experience role ambiguity were less satisfied than those who experience role conflict. Although most of the organizational variables they measured were more highly correlated with role ambiguity than with role conflict, the following organizational practices were significantly associated with both types of role stress: (1) delays in decision-making, (2) distortion or suppression of information, and (3) violations of the chain of command.

Tosi (1971) examined some aspects of a role-taking model proposed by Kahn et al. (1964). He found that role conflict was positively related to job threat and anxiety and negatively related to job satisfaction, while role ambiguity was of lesser importance.

In summary, role stress appears to be related to decreased performance and lowered satisfaction. The type and degree of role stress experienced, however, may vary as a function of moderating variables.

#### Moderating Variables

It has been hypothesized that one or more variables may influence or moderate the differential effects of role ambiguity and role conflict on individual and organizational

variables. For example, the hierarchical level in an organization where an employee resides is likely to affect the type and degree of pressure put upon him, which, in turn, are likely to affect the way he perceives the organization and the job. For example, Kahn et al. (1964), in their theory of role dynamics, hypothesized that employees at higher levels in an organization would be less concerned with role conflict than role ambiguity, simply because they have a means to reduce sources of role conflict (e.g., by modifying rules or regulations).

Schuler (1975, 1977a), in a study of employees of a manufacturing firm, found that role ambiguity was more negatively related to job satisfaction than was role conflict for higher level employees, and that the reverse was true for lower level employees. Further, he concluded that participation in decision-making should be considered as a moderating variable in the relationship between role perceptions and employee satisfaction (1977a). Although he hypothesized that employee ability could also affect the relationship between role perceptions, satisfaction, and performance, this hypothesis was not supported (1977b).

Hammer and Tosi (1974), in an investigation of the effects of role stress on high-level managers, found that role conflict was not related to job satisfaction, but that there was a significant negative correlation between role ambiguity and job satisfaction. They found that higher level jobs were characterized by ambiguous situations and unstructured problems, which supports the previous finding that managers are more concerned with role ambiguity than with role conflict (Kahn et al., 1964). In contrast, Miles (1976), who examined the relationships between personal outcomes (e.g., tension, dissatisfaction, propensity to leave) and role stress across five hierarchical levels, found that such relationships were not moderated by organizational level.

Other studies suggest curvilinear relationships between hierarchical level and role stress. Wispe and Thayer (1957) found that assistant managers in an insurance corporation were more concerned with role ambiguity than were either managers or agents. Roethlisberger (1945) suggested that those at higher organizational levels will typically be more affected by role ambiguity; and those at middle levels, by role conflict. He describes the plight of the foreman who must try to satisfy his boss, to follow rules and policies set up by top management, and to handle requests for help and complaints from his subordinates and workers. Since foreman generally are not trained to handle or respond to conflicting expectations of workers and management, the discrepancy between their perceptions of what a foreman should be and what he actually is can be both disconcerting and dissatisfying. In another study of foremen, Charters (1952) found that conflicting expectations were negatively related to feelings of being "caught in the middle" only if (1) foremen interacted with the workers and management personnel who have the conflicting expectations, (2) they accurately perceived the contradictory nature of the expectations, and (3) they were motivated to conform to the expectations of both workers and management. Many foremen who felt "in the middle" accepted the situation as a legitimate aspect of their jobs and were neither insecure nor discontent. If, however, foremen felt a need to respond to conflicting pressures, they were adversely affected by role stress.

It is apparent that there is no clear-cut relationship between hierarchical level and role stress. Some studies indicate a linear positive relationship, others indicate a nonmonotonic relationship, and still others show no relationship at all. This suggests that other variables may also be operating to modify the relationship between role stress and outcome variables.

In their theory of role dynamics, Kahn et al. (1964) include personality factors and motivational orientation as important determinants of role stress and the way people

Since the development of this theory, researchers have investigated react to it. personality and motivational characteristics and values in an attempt to better understand role stress. For example, Beehr, Walsh, and Taber (1976), in an investigation of the relationship between role stress and individual and organizational values, found that role ambiguity, role conflict, and role overload were related to individual values concerning fatigue, tension, and job dissatisfaction. Keller (1975) hypothesized that role conflict and role ambiguity would be negatively related to dimensions of job satisfaction and that personality-related values would be related to role conflict, role ambiguity, and job satisfaction. He found that role conflict was negatively related to three dimensions of job satisfaction: supervision, pay, and promotions; and that role ambiguity was strongly negatively related to satisfaction with the work itself. No relationship was found, however, between personality-related values and either role stress or job satisfaction. The values investigated by Keller were those included in "The Study of Values Test" (Allport, Vernon, & Lindzey, 1960), which was designed to measure theoretical, economic, aesthetic, social, political, and religious values. Similarly, White and Ruh (1973) found no relationship between personal values and work-related dimensions. It could be argued that this occurred because the dimensions are somewhat abstract and removed from one's everyday work experiences. Finally, research has shown that the relationship between role stress and satisfaction measures is moderated by (1) autonomy and group cohesiveness (Beehr, 1976), (2) needs for achievement and independence (Johnson & Stinson, 1975), and (3) the need for clarity (Lyons, 1971).

In summary, personality-related values, unlike personal variables, have not been shown to be related to perceived role stress or to other job-related phenomena. This could be due either to the homogeneous value set adopted by most individuals working in organizations in the United States, where most of the studies of values have been conducted, or to the difficulties encountered in attaining accurate measures of individual values due to their abstract nature.

## Purpose

The purpose of this study was to determine (1) whether perceptions of role stress differ across hierarchical levels within organizations, (2) whether type and degree of perceived role stress differ across cultural settings, (3) how role stress relates to personal and work values, (4) how role stress relates to various organizational variables (e.g., organizational climate, managerial practices, characteristics of supervision, and job characteristics), and (5) whether role ambiguity and role conflict relate differently to job satisfaction and performance across levels.

#### **APPROACH**

## Organization Studied

The Navy Public Works Centers (PWCs), which provide engineering, maintenance (including rehabilitation construction), utilities, transportation, and housing to U.S. Navy customers within their geographic area, were chosen as the organization in which to conduct this study. There are five PWCs within the continental United States (CONUS)-Great Lakes, Norfolk, Pensacola, San Diego, and San Francisco (Oakland), and four others in the Pacific area--Guam, MI; Pearl Harbor, HI; Subic Bay, PI; and Yokosuka, Japan. Their annual operating budget ranges from \$60 million to \$120 million; and the number of persons employed, from 675 to 3400.

The Naval Facilities Engineering Command (NAVFAC) is responsible for the operation of the PWCs. Thus, most of the policies governing the operations of each center are formulated by NAVFAC and are standardized. NAVFAC uses information and control systems so that PWC work activities can be centrally monitored and directed.

PWCs are almost identical as to tasks performed, available technology, organizational structure, and managerial background. To the extent that they service one large organization (i.e., the U.S. Navy shore establishment), the nature of their work and the means to accomplish it are consistent across sites. Structurally, each consists of four major hierarchical levels: (1) top management, consisting of officers from the Navy's Civil Engineering Corps, (2) middle management, consisting of civilian department heads, (3) several civilian supervisory levels, and (4) the civilian labor force. Except for the Center at Yokosuka, which has a number of Japanese department directors, top and middle managers are U.S. citizens, mostly Caucasian and male. The supervisory levels and the labor force, however, are made up of individuals from the community where the PWC is located. Thus, the similarities among organizations lie in their tasks, technology, organizational structure, and managerial background. Most of the differences are in the surrounding physical and social environments as well as in the ethnic and cultural composition of the labor force and supervisors.

#### Sample

Six of the nine PWCs were included in the study. Of these, three were located within CONUS--San Francisco, Great Lakes, and Norfolk; and three, in the Pacific area--Pearl Harbor, Yokosuka, and Subic Bay. The Commanding Officers of these PWCs encouraged all managers and supervisors to participate; these personnel, in turn, selected a sample of the work force representative of all PWC departments. The distribution of the final sample, which was drawn from all hierarchical levels of the organization, is shown in Table 1.

## Survey Questionnaire

Two questionnaire forms were designed: one for the work force (Form A); and the other, for supervisory and managerial personnel (Form B) (see Appendices A and B). In many cases, questionnaire items were taken from scales previously used to measure the constructs of interest. Although the two forms were very similar, items that assessed attitudes toward supervision and control systems were included in Form A; and those that measured interdepartmental relations and various managerial practices, in Form B.

Table I

Distribution of Study Participants by Hierarchical Level

	Hierarchical Level									
Location	Workers	Supervisors	Middle Managers (Civilian Depart- ment Heads)	Top Manage- ment (Military Officers)	Total					
San Francisco	159	42	11	8	220					
Great Lakes	166	34	6	10	216					
Norfolk	199	127	10	4	340					
Pearl Harbor	123	98	6	4	231					
Yokosuka	74	74	10	4	162					
Subic Bay	259	163	12	4	438					
Total	980	538	55	34	1607					

Questionnaire items are described below:1

- 1. <u>Demographics (D) (Items 1-12, A-3 and 1-13, B-3)</u>. Items were intended to obtain demographic characteristics (e.g., age, ethnic identification, and tenure) of individual sample members.
- 2. Role Stress (RS) (Items 29-43, A-12/13 and B-10/11). Fifteen items were selected from the role stress scale developed by Rizzo et al. (1970). Seven of these items related to role conflict; and eight, to role ambiguity.
- 3. <u>Cultural Values (CV) (Items 10-17, A-18 and B-16)</u>. To assess cultural values, 16 values were selected from Rokeach's Instrumental Value Survey (Rokeach, 1973). Respondents were asked to choose the four values they considered most important and the four they considered least important.

<sup>&</sup>lt;sup>1</sup>Since the items assessing any one construct are sometimes scattered within the questionnaire form rather than clustered in a specific part, the questionnaires provided in Appendices A and B are keyed to facilitate identification. For example, items pertaining to demographic characteristics are marked "D," while those pertaining to role stress are marked "RS." A complete key appears on the title page of each appendix. Unkeyed items do not pertain to constructs of interest in this report, and were not used in analyses.

- 4. Job Values (JV) (Items 14-19, A-11 and B-9). Respondents were presented with a list of nine specific job values (e.g., pay, security, recognition, and respect) and asked to choose the three they considered most important and the three they considered least important. Items were also included to assess feelings of responsibility toward the job.
- 5. Organizational Climate (OC) (See Footnote 1.). Items exploring climate dimensions were adapted from those developed by Campbell and Beaty (1971). These items assessed employees' perceptions of such organizational dimensions as climate, competence, flexibility, openness, status, and morale.
- 6. General Job Characteristics (GJC) (See Footnote 1). These items, which are similar to those included by Jenkins, Nadler, Lawler, and Cammann (1975) in their Nature of the Job Scale, assessed employees' perceptions of the characteristics of tasks performed as part of their jobs. Such characteristics included variety, skills, autonomy, cooperation, independence, task feedback, meaningfulness, and pace control.
- 7. Specific Job Characteristics (SJC) (See Footnote 1). These items were directed at characteristics particularly relevant to the PWC concerns, such as material handling, transportation, and equipment problems.
- 8. Supervisory Influence (SI) (Items 32-51, A-23/24; 53-72, B-24). Respondents were presented with a list of 10 supervisory duties (e.g., scheduling work, hiring or firing employees, and settling disagreements). Workers were asked to indicate how much influence they felt their supervisors did have and should have in specific areas; and supervisors, how much influence they felt they themselves had and should have in these areas.
- 9. Perceptions of Supervisors (POS) (Items 1-14, A-9/10; 52-53, A-24). Respondents to Form A (workers) were asked to indicate how well they felt their supervisors performed various supervisory duties.
- 10. Managerial Practices (MP) (See pages B-16/18, B-21; B-25/26.). Respondents to Form B (supervisors and managers) were asked to indicate how they felt managerial practices had affected such areas as: (a) flexibility (management's ability to adjust to the demands of the environment), (b) coordination (subsystems working together to facilitate goal attainment), (c) supervisory practices, (d) control system responsiveness (the ability to monitor attitudes and to provide feedback and rewards), and (e) communication processes (upward and downward).
- 11. Job Satisfaction (JS). All respondents were asked to indicate how satisfied they were with various job aspects (e.g., pay, security, chances for getting ahead).
- 12. <u>Effectiveness (E) (Items 17-21, A-16 and B-14)</u>. Respondents were asked to rate their center as to (a) overall performance, (b) productivity, (c) adaptability, (d) responsiveness, and (e) customer satisfaction.

#### Procedure

Questionnaires were administered to groups of approximately 5 to 25 workers or supervisory personnel (supervisors and managers) at the six PWC sites included in the study. Workers and supervisory personnel met separately to complete the questionnaires since (1) the two groups received different forms and (2) researchers felt that members of both groups would respond more candidly if they were not in the presence of persons from different levels. At the centers in Japan and the Philippines, questionnaires had been

translated into Japanese and the Tagalog dialect respectively. Also, at all sessions held at these centers, translators were present to explain the purpose of the study, to give instructions, and to answer questions.

## **Analyses**

Responses to the items included to measure role stress were factor analyzed to determine whether the role stress being perceived by respondents could be categorized under role ambiguity and role conflict—the two composites of role stress conceptualized by Rizzo et al. (1970). Next, analyses of variance were performed to determine whether factor scores obtained on role stress composites were affected by center location and hierarchical level, and factor analyses were performed on responses to items assessing organizational climate (OC), general job characteristics (GJC), specific job characteristics (SJC), managerial practices (MP), supervisory influence (SI), and job satisfaction (JS) to reduce the variables to a reasonable number. Factor scores for the factors emerging from these analyses were then correlated with role ambiguity and role conflict factor scores. Finally, multiple regressions were performed to determine which factors were the best predictors of role ambiguity, role stress, intrinsic job satisfaction, and perceived work center performance.

## Hypotheses

It was hypothesized that:

- 1. Perceived role stress would differ across cultural settings.
- 2. Perceived role stress would differ as a function of hierarchical level, and of the values of organization members.
- 3. Role stress would be related to organizational variables such as climate, managerial practices, supervisory characteristics, and job characteristics.
- 4. Role ambiguity and role conflict would be differentially related to job satisfaction and performance for employees from different hierarchical levels.
  - 5. Role stress would be negatively related to job satisfaction and performance.

#### RESULTS

#### **Role Stress Factor Scores**

Results of the principal components factor analysis, using varimax rotation, performed on responses to the items included to measure role stress are provided in Table 2. As shown, two factors emerged—role ambiguity and role conflict—the two composites of role stress conceptualized by Rizzo et al. (1970).

For use in subsequent analyses, role conflict and role ambiguity factor scores were computed for each respondent. Mean factor scores across center location and hierarchical level are presented in Table 3.

To provide a clearer picture of the amount of role ambiguity and role conflict being experienced by respondents than could be obtained by observing the role stress factor scores, overall composite scores were obtained by summing the scores obtained by respondents on the items measuring each factor. Subjects responded to the role stress items using a 5-point scale, where I = To a very great extent, and 5 = Not at all. As can be seen in Table 2, the eight items loading on role ambiguity were worded so that the more positive the score, the more ambiguity perceived; and the seven items loading on role conflict, so that the more negative the score, the more conflict perceived. Thus, the role ambiguity scale score could range from 8, meaning "no ambiguity" to 40, meaning "maximum ambiguity"; and the role conflict scale score, from 7, meaning "maximum conflict," to 35, meaning "no conflict." The overall scores, which are shown in Table 4, indicate that moderate amounts of both role ambiguity and role conflict were reported at all levels. These scores were not used in subsequent analyses.

## Effect of Center Location and Hierarchical Level on Role Stress Perceptions

To determine whether perceptions of role ambiguity and role conflict were affected by center location and hierarchical level, two-way analyses of variance (ANOVAs) were performed on respondents' role ambiguity and role conflict factor scores, using center location as one variable; and hierarchical level, as the other. Table 5, which summarizes the results of these ANOVAs, shows that significant effects were obtained for both location and level for both role ambiguity and role conflict, and that there was a significant interaction between location and level for role conflict.

An examination of Table 3 may shed some light on these findings. First, the means presented show that, for all centers except Great Lakes, workers perceived the greatest amount of role ambiguity, followed by managers and supervisors; and that, across levels, employees at PWC Japan reported less ambiguity than did those in the four U.S. centers. Duncan's range test was performed on this latter finding, and the difference was shown to be significant (W = .21, p < .05).

Further, Table 3 shows that supervisors and managers in the U.S. centers reported more role conflict than did the workers, while overseas workers reported more conflict than did supervisors and managers. A posterior t-tests confirmed these trends (t (1, 1589) = 6.16, p < .001; t (1,1589) = 1.97, p < .05 respectively). It was also demonstrated a posterior (Duncan's Range test) that workers at Subic Bay reported significantly more role conflict than did those at other centers (W = .24, p < .05).

Table 2
Summary of Factor Analysis of Role Stress Items

		Factor 1	Loadings
	Factor/Items <sup>a</sup>	I	II
ı.	Role Ambiguity		
	To what extent:		
	Do you know exactly what is expected of you?	.68	07
	Do you know what your responsibilities are?	.62	.01
	Do you know that you have divided your time properly?	. 58	04
	Are explanations clear about what has to be done?	. 57	13
	Do you know if your work will be acceptable to your boss?	. 54	.03
	Do you feel certain about how much authority you have? Do you feel certain about how you will be evaluated for	.52	.05
	a raise or promotion?  Are you given enough time to do what is expected of you	.47	.00
	on your job?	.35	32
11.	Role Conflict		
	To what extent:		
	Do you receive assignments without the manpower to		
	complete them?  Do people ask you to do things on your job which get in	00	.66
	the way of your work?  Do you have to break rules to get everything done on your	03	.62
	job?	10	. 57
	Do you work under conflicting policies and guidelines?	08	. 55
	Do you do things that are likely to be accepted by one		• • • • • • • • • • • • • • • • • • • •
	person and not accepted by others?	02	. 54
	Does it seem like you have too much work for one person		.,,
	to do?	.11	. 50
	Is it difficult to satisfy everybody at the same time?	00	.45

<sup>&</sup>lt;sup>a</sup>See Appendices A and B, Items 29 through 43, pages A-12/13, and B-10/11.

Table 3

Role Stress Mean Factor Scores
by Center Location and Hierarchical Level

		Hierarchical Leve	el	
Center Location	Workers	Supervisors	Managersa	Row Marginals
	R	ole Ambiguity <sup>b</sup>		
San Francisco	.20	09	22	.16
	(159)	(42)	(19)	(220)
Great Lakes	.15	.20	29	.13
	(166)	(34)	(16)	(216)
Norfolk	.00	33	58	.15
	(199)	(127)	(14)	(340)
Pearl Harbor	.26	.07	18	.16
	(123)	(98)	(10)	(231)
Yokosuka	13	38	77	17
	(74)	(74)	(14)	(162)
Subic Bay	.10	15	43	01
	(259)	(163)	(16)	(438)
Column Marginals	.13 (980)	15 (538)	40 (89)	(1607)
2,000		Role Conflict <sup>C</sup>		10 10 11 11
San Francisco	03	37	27	12
	(159)	(42)	(19)	(220)
Great Lakes	.19	37	04	.08
	(166)	(34)	(16)	(216)
Norfolk	.30	.04	04	.16
	(199)	(127)	(14)	(340)
Pearl Harbor	.09	17	31	04
	(123)	(98)	(10)	(231)
Yokosuka	.22	.14	.40	.19
	(74)	(74)	(14)	(162)
Subic Bay	27	02	07	17
	(259)	(163)	(16)	(438)
Column Marginals	.04 (980)	08 (538)	06 (89)	(1607)

Note. Number of subjects in parentheses.

<sup>&</sup>lt;sup>a</sup>Includes both military managers and department heads.

<sup>&</sup>lt;sup>b</sup>The more positive the score, the more role ambiguity perceived.

<sup>&</sup>lt;sup>C</sup>The more negative the score, the more role conflict perceived.

Table 4

Mean Scale Scores by Hierarchical Level

Group	Mean Role Ambiguity Scale Score	Mean Role Conflict Scale Score
Workers	20.18	22.26
Supervisors	18.83	21.84
Managers (Military and Civilian)	17.45	22.21

Note. Scores on the Role Ambiguity Scale could range from 8 (None) to 40 (Maximum); and those on the Role Conflict Scale, from 35 (None) to 7 (Maximum).

Table 5

Analysis of Variance Summary for Role Stress Factor Scores

Source	Sum of Squares	Degrees of Freedom	Mean Square	F	P
	Rol	e Ambiguity			
Mean	9.6928	1	9.6928		
Center Location	12.7864	5	2,5573	3.50	.001
Hierarchical Level	35.1573	2	17.5787	24.03	.000
Location x Level	6.7143	10	.6714	.92	.515
Error	1162.1992	1589	.7314	.,,	.)1)
Total	1226.5500	1607			
	Ro	le Conflict			
Mean	.6036	1	.6036		
Center Location	15.1776	5	3.0355	4.24	.001
Hierarchical Level	13.3927	2	6.6964	9.33	.000
Location x Level	27.5919	10	2.7592	3.84	.000
Error	1140.9648	1589	.7180	2.04	.000
Total	1197.7306	1607			

## Relationship Between Role Stress and Various Organizational/Environmental Variables

#### Cultural and Work Values

To determine whether the significant main effects obtained for location on both role conflict and role ambiguity were related to cultural and job values, subjects' responses to items assessing these values were analyzed and given a numerical rating. The values selected as one of the four most important were assigned a 3; those selected as one of the four least important, a 1; and those not selected at all, a 2. Correlations between the ratings assigned the 25 values and the role ambiguity and role conflict factor scores were then run separately for workers and supervisors. No significant correlations emerged; in fact, only one correlation exceeded .20.

It was felt that these results might have resulted from grouping all center locations. Therefore, respondents were assigned to groups, which were analyzed separately: Those from the four U.S. PWCs served as one group; those from PWC Subic Bay, as a second; and those from PWC Yokosuka, as a third. This grouping was based on a hierarchical grouping analysis that indicated that the values of workers at U.S. centers were similar to each other, but different from those of workers at Subic Bay and Yokosuka (Reidel, Sheposh, & Young, 1979). Within these groupings, correlations between mean role ambiguity and role conflict scores and all 25 cultural and work value ratings were run separately for workers and supervisors. Again, no significant correlations emerged.

In a final attempt to determine whether role stress was related to cultural and job values, respondents having role ambiguity or role conflict factor scores greater than 1 were assigned to a high role ambiguity or role conflict group, and those with scores less than 1, to a low group. Cross-tabulations conducted to compare the responses of the two sets of high and low groups showed that there were no significant differences.

## Organizational Climate and Job Characteristics

The results of the factor analyses performed on questionnaire items designed to measure organizational climate, specific job characteristics, and general job characteristics are provided in Table 6. As shown, five factors emerged for organizational climate; four, for specific job characteristics; and five, for general job characteristics. (Factors were included only if their eigenvalues exceeded .75.)

To determine whether these factors were related to role stress, respondents' scores on these factors were correlated with their factor scores on role ambiguity and role conflict. Results are presented in Table 7 and discussed below:

- 1. Organizational Climate. Table 7 shows that higher degrees of perceived role ambiguity are significantly associated with (a) negative perceptions of military management, (b) less work force/management agreement, (c) less openness/cooperative atmosphere within the organization, and (d) lower esprit de corps among organization members. Role conflict is also significantly related, but not to the same degree, to negative perceptions of military management and lower degrees of openness and esprit de corps. Thus, except for perceived problems, which correlated highly with role conflict, it appears that organizational climate is more strongly related to role ambiguity than to role conflict.
- 2. Specific Job Characteristics. Perceptions of role ambiguity were significantly related to material and manpower waste; and perceptions of role conflict, to all of the specific job characteristic factors.

Table 6
Summary of Factor Analyses of Items on Organizational Variables

				Factor Loading		
	Factor/Items	1	ıı	ttt	(V	
	Organiza	tional Climate	•			
	Problems					
	Problems between people of different					
	ethnic backgrounds	<del>.78</del> <del>.76</del>	03 06	09 07	08	-:
	Ethnic problems hurt center performance Employee theft presents a problem	.50	.08	.07	08	-:
	(Items 2, 3, 4, A-15 and B-13)	120		,		
	Perceptions of Military Management					
	Military management's ability to deal with					
	personnel	04	.77	.11	.21	
	Military management's financial management skills Opinion of civilians toward military	.01	.71	.07	.24	
	Necessity of military management for successful	.03	.55	.11	.13	
	operation	.11	. 58	.11	.04	
	Effect of military management on up-and-down					
	communication	.14	.57	.17	.09	:
	Opinion of military toward civilians (Items 9-14, A-15/16 and B-13/14)	08	. 36	.07	.22	
	Work Force/Management Agreement					
	Agreement on the way people are viewed	.00	.13	.77	.15	
	Agreement on the way the world is viewed	.04	.06	.70	.05	
	Agreement on individual value systems	01	.16	.70	.23	
	Agreement on problems facing Public Works Centers	04	.18	.53	.24	
	Agreement on supervisory practices (Items 9-13, A-11 and B-9)	03	.20	.48	.35	
	Openness					
•	Supervisors willing to hear your problems	22	.07	.16	57	
	Workers confident in management's judgment	.04	.23	.30	.55	
	Cooperation exists between departments	.02	.23	.16	.50	
	Cooperative atmosphere among workers	12	.06	.12	.50	
	Rating of job security	05	.18	.03	.46	
	Individual judgment trusted on work matters Effectiveness of center with unexpected problems	.02 11	.09	.04	.43	
	(Items 3-7, 9, 12; A-4 and B-4)		.01	•••	1.12	
	Esprit de Corps					
	Extent of esprit de corps	.03	.21	.24	.28	
	Efficiency of Public Works Centers	.09	.24	.18	.34	
	People goof off if not watched (Items 10, 13, 15; A-4/5 and B-4/5)	12	.13	.12	.02	
_		h Characteries	lice			
_		b Characteris				
	Material Waste					
	Damaged material contributes to waste Wrong material delivered contributes to waste	.72 .71	09 20	.03 01	.09	N
	Theft contributes to waste	. 58	.06	.19	.16	N
	Procedures for turning in material cause waste	. 54	23	.18	.07	N
	Stockpiling of material occurs	.46	.12	.31	.13	N
	Material wasted at this Public Works Center (Items 25-30, A-7; 28-33, B-6)	.44	.33	. 38	.03	N
	Materiel					
	Workers get the supplies they need	10	59	00	03	N
	Workers are successful at getting material	14	.58	.05	.08	N
	The Material Department gets the material to the					
	job site	11	. 57	03	07	N
	Equipment is safe Vehicles are designed to do the job	.07	.48	11	14	N
	Transportation is safe	.04	.46	13	44	N
	(Items 21-23, 32, 34-35, A-7/8; 24-26, 34-35, 38, B-6/7)		-12			
	Manpower Waste					
	There are more workers than are needed on the job	.11	.04	. 60	.04	N
	There are times without enough work to keep busy	.09	04	. 56	.06	N
	Time spent in nonproductive activity	. 26	27	.49	01	N
	(Items 37, 38, 41, A-8; 40, 41, 44, B-7)					
	Vehicles					
	Frequency of vehicle breakdown	.10	15	.15	.63	N
	How much better vehicles would increase production	. 26	.01	06	44	2 2
	Safety of transportation	.94				

Table 6 (Continued)

				Factor Loading		
	Factor/Items	1	II	111	IV	V
	General 3	lob Characteris	tics			
ı.	Pay and Fringe Benefits					
	Pay is fair considering others in industry Pay is fair considering others in the organization (Items 6-7, A-10 and B-8)	.68	09 .03	.00	N/A N/A	N/A N/A
11.	Job Challenge					
	Job gives an opportunity for independence Job is significant and important (Items 14-15, A-6; 18-19, B-5)	.01	.37 .36	.00	N/A N/A	N/A N/A
111.	Reward Contingencies					
	Likelihood that one doing a bad job will be reprimanded Likelihood that one doing a good job will be rewarded	03	07	.52	N/A N/A	N/A N/A
ıv.	(Items 4-5, A-10 and B-8)  Job Importance (Workers Only)					
	Job requires high level skills Job gives a feeling of accomplishment Job requires cooperation with others Job requires you to handle surprising situations Job is crucial for many others' work (Items 1, 2, 6, 9, 12, A-5/6)	N/A N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A	.62 .60 .54 .54	.18 .14 .04 .09
٧.	Time Constraints (Workers Only)					
	Frequently asked to do excessive amounts of work Job permits no free time Frequently interrupted for reasons unrelated to work (Items 2, 4, 5, A-5)	N/A N/A N/A	N/A N/A N/A	N/A N/A N/A	.18 .26 .03	.60

Table 7

Correlations of Role Ambiguity and Role Conflict Factor Scores
With Organizational Climate and Job Characteristics Factors

Factor	Role Ambiguity	Role Conflict
Organizational Climate		
Perceptions of military management	.24**	07*
Work force/management agreement	.20**	06
Openness	.42**	17**
Esprit de Corps	.21**	18**
Problems	.02	.30**
Specific Job Characteristics		
Material waste	03	.30**
Materiel	.31**	18**
Manpower waste	14**	.22**
Vehicles	02	.22**
General Job Characteristics		
Pay and fringe benefits	.05	15**
Job challenge	.40**	08**
Reward contingencies	.30**	08**
Job importance (workers only)	.33**	.00
Time constraints (workers only)	.07	.27**

<sup>\*</sup>p < .01.

3. General Job Characteristics. Higher degrees of perceived role ambiguity and role conflict were significantly associated with feelings that the job was not challenging and that reward contingencies were inappropriate. Also, role conflict was associated with feelings that the pay was unfair compared to that of others.

As shown in Table 6, two general job characteristic factors--those concerning job importance and time constraints--were extracted from items to which only the work force responded. Perceptions of role ambiguity correlated significantly with feelings that the job was unimportant, while role conflict correlated with pressures related to time constraints.

## Supervisory Influence

As indicated previously, items assessing supervisory influence asked workers to indicate how much say they felt their supervisors had and should have in 10 specific areas; and supervisors/managers, how much they felt they themselves had and should have in those areas. Responses were made on a 5-point scale, where l=A great deal and s=A should be in each area. As shown in Table 8, they could range from -4 to +4.

<sup>\*\*</sup>p < .001.

Table 8
Frequencies of Discrepancy Scores by Hierarchical Level

	Discrepancy Score								
Item	-4	-3	-2	-1	0	1	2	3	4
How much say (does/do) (your supervisor/you) have and how much say should (he/you) have in making decisions about:									
How you do your work									
Workers Supervisors		12	22	123 52	389 322	192 84	67 12	40	12
Managers		-	-	5	71	8	2	-	-
Scheduling work			Name of the last o						
Workers	-	4	23	114	390	200	72	28	12
Supervisors Managers		1	6	44 6	301 68	87 5	27 5	8	
Handling problems					•••				
Workers		6	23	75	345	207	124	36	12
Supervisors		ì	4	51	318	74	15	5	1
Managers				3	66	14	2		
Hiring people									
Workers	3	15	23	104	327	155	108	40	28
Supervisors	2	1	5	41	215	80	63	41	16
Managers				4	59	11	7	2	-
Pay raises									
Workers	8	5	10	45	329	120	123	79	60
Supervisors	1	3	3	14	218	62	84	48	20
Managers	-		-	1	41	13	15	3	8
Firing people									
Workers	7	4	35	74	316	140	94	59	40
Supervisors		1	5	11	214 50	96 17	61	45	16
Managers		-		,	,,,	17	,	•	-
Promoting people									
Workers Supervisors	6	3	27 1	77 19	309 213	149 95	111 67	69 39	16
Managers		i	1	1	50	17	11	2	
When people take time off									
Workers	4	15	35	101	411	138	64	25	11
Supervisors			4	29	298	77	26	9	
Managers				3	59	17	1	2	-
<ul> <li>What to do when something unexpected happens</li> </ul>									
Workers	2	3	16	76	398	194	103	24	17
Supervisors	-	2	5	40	303	99	11	4	1
Managers	-			4	69	10	1		
Settling disagreements						Marie 1			
Workers	1	1	18	57	353	201	94	50	30
Supervisors Managers		2	1	27	313 63	93 15	22 1	5	

## Notes.

- 1. A more positive score indicates supervisors have less say than they should.
- 2. Since some respondents did not answer all questions, the totals in this table for employees at each hierarchical level may be less than the actual total.

To determine whether respondents' perceptions of supervisory influence were related to role ambiguity and role conflict, discrepancy scores were correlated with mean role ambiguity and role conflict scores. Results are provided in Table 9, which shows that, for workers, discrepancies in authority in handling problems and settling disagreements correlated significantly with both role ambiguity and role conflict; and those in authority in responding to unexpected events, with role conflict only.

For supervisors, discrepancies in authority in doing work, scheduling work, handling problems, firing people, and promoting people correlated significantly with both role ambiguity and role conflict. Discrepancies in authority in hiring people correlated significantly with role ambiguity only; and those in authority in granting pay raises, with role conflict only.

For managers, discrepancies in authority regarding hiring and promoting people correlated significantly with role ambiguity. Discrepancies in authority in doing work, scheduling work, and handling problems correlated significantly with role conflict. For further analyses, the questionnaire data obtained on items measuring supervisory influence were factor analyzed. The items comprising each factor and their factor loadings are presented in Table 10.

## Workers' Perceptions of Supervision

Results of the factor analyses performed on items designed to assess workers' perceptions of supervisors are provided in Table 11. To determine whether these factors were related to role stress, respondents' factor scores were correlated with their role ambiguity and role conflict factor scores. Results showed that workers who reported high levels of role ambiguity felt that their supervisors were incompetent or unsupportive, and that those who reported high levels of role conflict felt that their supervisors were biased. The correlation between supervisory competence and role ambiguity was .32; that between supervisory support and role ambiguity, .29; and that between supervisory bias and role conflict, .33. All of these correlations were significant at the .01 level.

## Supervisory Personnel's Perceptions of Managerial Practices

Results of the factor analysis of items included to assess supervisors' perceptions of managerial practices are provided in Table 12; and correlations between respondents' factor scores and role ambiguity and role conflict factor scores, in Table 13. As shown, more role ambiguity and role conflict were perceived by supervisors when they felt that the flow of communication was hampered, workers were being derogated, performance standards were not well established, and supervision was being bypassed.

## Results of Multiple Regression Analyses

## Predictors of Role Ambiguity and Role Conflict

To examine the relative influence of organizational climate (OC), specific job characteristics (SJC), general job characteristics (GJC), and supervisory influence (SI) factors (see Tables 6 and 10) on role stress, multiple regression analyses were performed to determine which factors were most predictive of role ambiguity and role conflict. Results are provided in Table 14, which shows that perceptions of job challenge are the best predictor of role ambiguity for workers, followed by materiel, openness, and perceptions of military managers. For supervisors, openness is the best predictor of role ambiguity, followed by perceptions of military management, work force/management agreement, and job challenge.

Table 9 Correlations of Role Conflict and Role Ambiguity Factor Scores with Supervisory Influence Discrepancy Scores

Level/Item <sup>a</sup>	Role Ambiguity	Role Conflict
Workers		
How much say (does/should) your supervisor have in making decisions about:		
How you do your work	.02	01
Scheduling work	.06	01
Handling problems	.08*	10**
Hiring people	.01	01
Pay raises	.05	01
Firing people	02	01
Promoting people	.00	01
When people take time off	.03	06
What to do when something unexpected happens	.05	14**
Settling disagreements	.10*	16**
Supervisors		
How much say (do/should) you have in making decisions about:		
How you do your work	.14*	16**
Scheduling work	.15**	16**
Handling problems	.18**	21**
Hiring people	.12*	11
Pay raises	.05	12*
Firing people	.15**	12*
Promoting people	.13*	12*
When people take time off	.10	00
What to do when something unexpected happens	.09	01
Settling disagreements	.08	01
Managers		
How much say (do/should) you have in making decisions about:		
How you do your work	.02	~.37*
Scheduling work	.21	~.45**
Handling problems	.20	50**
Hiring people	.39*	19
Pay raises	.09	27
Firing people	.23	19
Promoting people	.42*	19
When people take time off	.02	15
What to do when something unexpected happens	.29	05
Settling disagreements	.30	19

 $\underline{\text{Note.}}$  Number of respondents ranged from 773 to 857 for workers; from 449 to 481 for supervisors; and from 52 to 55 for managers.

altems 32-51, A-23/24; 53-72, B-24.

<sup>\*</sup>p < .01. \*\*p < .001.

Table 10
Summary of Factor Analyses of Supervisory Influence Items

		Factor	Loading
	Factor/Item <sup>a</sup>	I	II
ı.	Supervisory Influence in Task Matters		
	Supervisor's say in:		
	Handling problems you face	.83	.12
	How you do your work	.77	.15
	Scheduling your work	.72	.13
	What you do in an emergency	.66	.31
	Settling disagreements	.59	.36
II.	Supervisory Influence in Personnel Matters		
	Supervisors say in:		
	Promoting people	.22	.78
	Firing people	.15	.77
	Hiring people	.24	.65
	Pay raises	.10	.50

<sup>&</sup>lt;sup>a</sup>Items 32-51, A-23; 53-72, B-24.

Table 11

Summary of Factor Analyses of Items on Workers' Perceptions of Supervisors

		1	Factor Loadi	ng
	Factor/Item <sup>a</sup>	1	II	Ш
ı.	Supervisory Competence			
	Supervisor knows the administrative parts of his job	.72	.07	.41
	Supervisor knows the technical parts of his job	.69	.07	.47
	Supervisor helps you solve work-related problems	.65	.40	.23
	Supervisor is competent	.64	.30	.41
	Supervisor helps you develop your skills	.63	.40	.19
	Supervisor knows about on-the-job performance	. 58	.25	.15
	Supervisor sees you know what has to be done	. 57	.31	.18
	Supervisor does a good job judging your performance	. 57	.52	.23
	Supervisor demands high-quality work	.49	.30	01
	Supervisor checks to see how you are doing	.46	.25	.15
II.	Supervisory Support			
	Supervisor praises good work	.49	.60	.14
	Supervisor supports you	.46	. 58	.32
	Supervisor encourages you to participate in decisions	.35	. 54	.20
Ш.	Supervisory Bias			
	Supervisor shows favoritism	21	34	68
	Supervisor is biased on the basis of race	02	11	63

<sup>&</sup>lt;sup>a</sup>Items 1-13, A-9; 52-53, A-24.

Table 12 Summary of Factor Analyses of Managerial Practice Items

		Factor Loading						
	Factor/Item	1	11	III	IV	٧	VI	VII
ı.	Flow of Communication							
	Suggestions made to top management receive fair							
	evaluation	.69	.07	27	.05	.04	.08	.0
	Management is interested in ideas from below	.69	.17	15	03	.04	.12	0
	Communication flows up and down	.66	.14	19	.06	.12	.15	0
	Management sets up work to flow smoothly Supervisors are rewarded for helping subordinates with	.56	.12	12	04	.25	.21	1
	skills	.52	.07	.02	.09	.11	.12	0
	Those in authority make prompt decisions to problems Good ideas don't go up because management is not	.52	.03	11	01	.09	.22	1
	approachable Written documents are an important part of the job	52		.46 10	.04	.00	02	.0
	You are encouraged to participate in decisions that affect you	.48	.11	10	02	09	.24	0
	(items 1, 5-7, B-16; 8, 11-12, 16-17, B-17; 20, B-18)	.40	.06	2)	02	09	.15	.0
11.	Production Management System (PMS)							
	PMS has improved coordination of Public Works Center							
	functions	.15	.90	.00	.23	.16	.06	0
	PMS has improved scheduling of work	.16	.90	.07	.17	.09	.08	0
	PMS has improved planning of work	.15	.88	.04	.21	.09	.09	0
	PMS has improved efficiency of work accomplishment (Items 24-27, B-21)	.15	.87	.01	.19	.17	.07	1
m.	Derogation of Workers							
	Information is withheld from workers	23	.02	.60	12	09	16	.1
	Workers are blamed when things go wrong Threats and punishments are used to get people to	17	02	.50	02	10	07	.0
	work	05	.19	.46	.12	.09	01	.1
	Small matters referred to higher-ups (Items 3, 4, B-16; 75, B-25, 87, B-26)	09	00	.41	.10	.10	.13	.0
I۷.	Reporting System							
	Necessary information is provided for reporting							
	systems to operate	.14	.40	00	.74	.04	.04	1
	Reporting systems accurately reflect what is taking							_
	place on the job	.27	.11	07	.63	01	.10	.0
	The effect of PMS upon the amount of work Pressure is applied to avoid the use of overhead	03	.13	.15	.51	.01	06	1
×	(Items 28-31, B-21)	11	.22	.03	.49	.07	.09	. 2
٧.	Performance Standards							
	Standards of performance are established in writing	.13	.10	06	02	.69	.03	.0
	Performance appraisals are based on written standards	.09	.16	03	.08	. 67	.03	0
	Performance standards are established for your job (Items 18-19, B-17; 73, B-25)	.13	.09	.11	.02	<u>.52</u>	.30	0
VI.	Proper Channels Followed							
	Chain of command is followed in decision-making	.37	.05	19	.04	.02	.63	.0
	Going through the proper channels is required (Items 84, 86, B-26)	.22	.ii	02	.05	.14	.58	.0:
VII.	Supervision Bypassed							
	Workers are given orders by those other than their							
	immediate supervisor	08	03	.27	06	10	07	.7
	Management bypasses levels below them in assigning							
	work	36	06	.33	00	06	21	.4
	work (Items 9-10, B-17)	36	06	.33	00	06	21	

Table 13 Correlations of Role Ambiguity and Role Conflict Factor Scores with Managerial Practice Factors

Factor	Role Ambiguity	Role Conflict
Flow of communication	.45**	26**
PMS	.08	03
Derogation of workers	17**	.32**
Reporting system	.07	.00
Performance standards	.10*	14
Proper channels followed	.06	02
Supervision bypassed	.18**	17**

<sup>\*</sup>p < .01. \*\*p < .001.

Table 14
Simple and Multiple Correlations of Role Stress Factor Scores by Level

Factor	β	Simple <sup>a</sup> r	Multiple R
Role Amb	iguity		
Workers (N = 980)			
Job challenge (GJC)	.27	.38	.38
Materiel (SJC)	.06	.31	.45
Openness (OC)	.18	.35	.48
Perceptions of military management (OC)	.17	.21	.51
Work force/management agreement (OC)	.12	.20	.53
Esprit de corps (OC)	.05	.22	. 53
Manpower waste (SJC)	07	18	. 54
$(r^2 = .29)$			
Supervisors (N = 596)			
Openness (OC)	.25	.45	.45
Perceptions of military management (OC)	.15	.29	.52
Work force/management agreement (OC)	.15	.21	. 56
Job challenge (GJC)	.17	.43	. 58
Reward contingencies (GJC)	.10	.32	.60
Supervisory influence in task matters (SI)	.16	.35	.62
Esprit de corps (OC) $(r^2 = .39)$	.08	.24	.62
Role Con	flict		
Workers (N = 980)			
Problems (OC)	.24	.36	.36
Openness (OC)	14	25	.44
Material waste (SJC)	.23	.34	.49
Vehicles (SJC)	.16	.23	. 52
Materiel (SJC)	14	19	.53
Pay and fringe benefits (GJC)	10	17	. 54
Manpower waste (SJC)	.11	.20	. 54
$(r^2 = .30)$			
Supervisors (N = 596)			
Esprit de corps (OC)	15	27	.27
Material waste (SJC)	.15	.23	.33
Perceptions of military management (OC)	12	21	.38
Work force/management agreement (OC)	12	19	.41
Manpower waste (SJC)	.14	.26	.43
Vehicles	.11	.18	.46
Supervisory influence in task matters (SI) $(r^2 = .22)$	10	14	.47

 $<sup>^{\</sup>rm a}$ All simple correlations are significant at p < .01.

Organizational problems and openness were most predictive of role conflict for workers; and esprit de corps and material waste, for supervisors.

## Predictors of Satisfaction and Work Center Performance

Respondents were asked to rate their work center's performance (Item 17, A-16 and B-14) and to indicate how satisfied they were with various aspects of the job (Items 20-28, A-11/12 and B-9/10). From factor analyses performed on responses to the satisfaction items, two factors emerged--intrinsic and extrinsic satisfaction (Table 15). Multiple regression analyses were then performed. Intrinsic satisfaction factor scores or the work center performance score were used as the criterion of organizational effectiveness; and the factors that emerged from factor analyses performed on items measuring role stress (RS), organizational climate (OC), specific job characteristics (SJC), general job characteristics (GJC), and supervisory influence (SI) as the independent variables (see Tables 2, 6, and 10).

As can be seen from Table 16, the sets of factors predicting intrinsic satisfaction were very similar for workers and supervisors. For both workers and supervisors, the two best predictors were esprit de corps (OC) and role ambiguity (RS). Both sets of factors produced a multiple correlation of .61, accounting for 37 percent of the variance.

When work center performance was used as the criterion, however, a different pattern of predictors emerged. For both workers and supervisors, openness (OC) was the best predictor of performance. Other factors included in both sets were perceptions of problems, manpower waste, and supervisory influence in task matters. Interestingly, however, perceptions of role ambiguity and role conflict were predictive of perceived work center performance for workers but not for supervisors; and esprit de corps, for supervisory personnel but not for workers. The multiple correlations for the sets of predictors for supervisors and for workers were .54 and .57 respectively accounting for 29 and 32 percent of the variance. In general, the predictors of center performance seem to be task-related, and the predictors of satisfaction, individual-related.

Table 15
Summary of Factor Analyses Performed on Satisfaction Items

		Loading				
	Factor/Item <sup>a</sup>	Factor I	Factor II			
ı.	Intrinsic Satisfaction					
	With chances to accomplish something	74	.17			
	With the opportunity to develop skills	63	.37			
	With recognition received	62	.30			
	With seeing results of your work	53	.06			
	With chances for getting ahead	49	.49			
	With respect received from co-workers	42	.24			
II.	Extrinsic Satisfaction					
	With pay	.07	.54			
	With chances for getting ahead	.49	.49			
	With job security you have	.24	.52			

<sup>&</sup>lt;sup>a</sup>Items 20-27, A-11/12 and B-9/10.

Table 16

Simple and Multiple Correlations of Factors with Intrinsic Satisfaction and Work Center Performance by Level

Factor	β	Simple <sup>a</sup>	Multiple R
Intrinsic Sat	isfaction		
Workers (N = 980)			
Esprit de corps (OC) Role ambiguity (RS) Reward contingencies (GJC) Job challenge (GJC) Perceptions of military management (OC) Work force/management agreement (OC) Openness (OC)	.27 .10 .11 .17 .20 .17	.40 .37 .38 .30 .25 .26	.40 .50 .53 .56 .58 .60
$(r^2 = .37)$ Supervisors (N = 596)		.51	.01
Role ambiguity (RS) Esprit de corps (OC) Perceptions of military management (OC) Job challenge (GJC) Work force/management agreement (OC) Openness (OC) (r <sup>2</sup> = .37)	.25 .20 .17 .08 .12	.50 .34 .31 .35 .21	.50 .55 .58 .59 .60
Work Center Po	erformance		
Workers (N = 980)			
Openness (OC) Role ambiguity (RS) Role conflict (RS) Manpower waste (SJC) Supervisory influence in task matters (SI) Problems (r <sup>2</sup> = .32)	.21 .22 08 09 .13 11	.41 .38 26 25 .26 17	.41 .48 .52 .53 .55
Supervisors (N = 596)			
Openness (OC) Manpower waste (SJC) Problems (OC) Supervisory influence in task matters (SI) Esprit de corps (OC) (r <sup>2</sup> = .29)	.36 10 13 .13 .14	.43 24 21 .28 .27	.43 .48 .51 .52 .54

<sup>&</sup>lt;sup>a</sup>All simple correlations are significant at p < .01.

#### **DISCUSSION AND CONCLUSIONS**

### Effects of Center Location and Hierarchical Level on Role Stress Perceptions

The results indicate that role conflict and role ambiguity are prevalent among Public Works Center (PWC) employees and that they are related to lower employee satisfaction and perceptions of decreased performance, as well as to organizational and environmental variables. In contrast to previous findings indicating that those in supervisory positions perceive the most role ambiguity (e.g., Sims & Szilagyi, 1975; Wispe & Thayer 1957), findings of this study showed that workers perceived the greatest amount. This may be due, in part, to the nature of the tasks PWC workers must perform. A considerable portion of PWC work relates to rehabilitation construction, which means that workers must frequently change jobs, and are constantly being exposed to different customers with different expectations. Frequent job changes require flexibility within the worker's task area and interdepartmental coordination with other occupational specialties. Ideally, supervisors would serve as on-the-job coordinators and problem-solvers. In actuality, however, they spend very little time on each job. Both the number of jobs and the paperwork a supervisor is required to handle prohibit close on-the-job supervision. Thus, workers must deal with ambiguity stemming from frequent job changes and coordination requirements without much direct assistance from their supervisors.

It may be that the role ambiguity being perceived by workers is related to the nature of the organization itself. PWCs are government-run, bureaucratic, formalized organizations. Thus, managers and-to a lesser extent-supervisors must respond to a control system that requires many routine paperwork tasks, and reduces the potential sources of role ambiguity. Since the majority of the job changes occur on the job site, managers are quite removed from this source of ambiguity. Supervisors must respond at least indirectly to on-the-job changes. Thus, as would be expected, they perceived a moderate amount of ambiguity.

In the U.S. PWCs, managers perceive more role conflict than do workers. It may be that they are more sensitive to the role conflict dimension because it partially represents perceived time pressures. If a job is not completed on time, perhaps because the material did not arrive on time or because there wasn't enough manpower to do the job, workers can blame poor supervisory planning or scheduling. Managers, however, must respond to pressures to do the job in the most cost-effective manner possible, while providing supervisors with sufficient, but not wasteful, guidelines with which to schedule jobs. Supervisors feel conflicts over time because they must be sympathetic to workers' problems in completing the job while meeting deadlines. The conflict expressed by civilian managers could be due to differences in tenure of military and civilian managers. Military managers, who occupy the top positions in the organization, are regularly reassigned to other commands, while civilian managers usually occupy one position for a long period of time. Thus, civilian managers may experience role conflict in responding to changing policies and directives initiated by new military managers.

An examination of role stress across the center locations shows that employees at the PWC in Japan perceive significantly less role ambiguity than those at the four U.S. PWCs. This may indicate that lower degrees of role stress are operating at the center, or it may reflect a tendency for employees in Japan to have positive, accepting attitudes toward their job.

At Subic Bay, workers perceived significantly more role conflict than workers at the other centers. This may be due to characteristics of the Filipino work force and the inequities they perceive in relation to the American employees at supervisory and

managerial levels. Filipino employees are paid in accordance with the Filipino standard of living; and Americans, with the much higher American standard of living. Because most of the supervisory and all of the managerial personnel are American, Filipino workers are required to respond to American supervision, which they may resent due to cultural differences and salary inequities. At the PWC in Japan, the top management personnel are U.S. citizens but all military mid-level managers are Japanese. Further, managers' and workers' salary schedules are based on the same standards. Consequently, the Japanese workers are not faced with a supervisory force of different ethnicity and salary schedules, which may explain why they do not feel as much role conflict as do workers in Subic Bay.

## Relationship Between Role Stress and Organizational/Environmental Variables

### Cultural and Work Values

Although there appeared to be some differences in perceptions of role stress across cultural settings, no relationship was found between these differences and respondents' cultural values. It may be that the personality-related values measured are in fact not related to role stress on the job, or it may be still another example of the difficulty encountered in measuring personality-related values (see Reidel, et al. 1979). The importance an individual places on certain values may be too intangible to measure with rankings. It is somewhat surprising, however, that no relationship was found between job values (e.g., pay, security) and role stress. Again, this may be a measurement problem, or it may be that there is no relationship between role stress and job values.

## Organizational Climate and Job Characteristics

From correlations between role stress components and organizational/job characteristics factors, it appears that perceptions of role ambiguity are more strongly correlated with organizational climate and general job characteristics; and perceptions of role conflict, with specific job characteristics. This is probably due, in part, to the fact that role conflict is partially a measure of day-to-day conflicting time pressures. For example, inadequate manpower and materials could prohibit members from meeting expectations on time. Role ambiguity seems to be less involved with day-to-day job activities and more involved with generalized considerations about one's role within the organization. Consequently, role ambiguity is more closely related to such organizational climate factors as openness, and to such general job characteristic factors as job challenge.

## Perceptions of Supervision

Workers who perceived their supervisors as incompetent and nonsupportive tended to report more role ambiguity; and those who perceived their supervisors as biased, more role conflict. Supervisors who are seen as incompetent and not supportive would be likely to provide unclear direction, or no direction at all. Those who are seen as biased are likely to be resented or mistrusted by workers, which could cause conflict when the workers are required to take direction from these supervisors.

## Supervisory Influence

It is not surprising that role stress was related to discrepancies in supervisors' perceptions of how much influence they felt they actually had and should have. The majority of respondents felt supervisors should have more say than they actually had. The greater the discrepancy, the greater the perceptions of role stress among supervisors.

The extent of role ambiguity and role conflict experienced by supervisors depended on the extent to which they felt they had less control than they should have over various supervisory problems.

### Managerial Practices

Supervisors' perceptions of four managerial factors--communication, derogating workers, establishing performance standards, and bypassing of supervision--were related to both role ambiguity and role conflict. Supervisors reported more stress when they felt that management failed to communicate or establish clear performance standards, workers were derogated, or supervision was bypassed. Basically, they perceived more role stress when they felt managerial practices were ineffective, which suggests that openness in supervisory and managerial practices may serve to reduce perceptions of role stress among supervisors.

### Results of Multiple Regression Analyses

### Predictors of Role Ambiguity and Role Conflict

The relative effects of supervisory influence, organizational climate, and job characteristic variables in predicting role ambiguity and role conflict proved to be enlightening. It appears that perceptions of the openness or cooperative atmosphere existing within the organization are most closely related to supervisors' perceptions of role ambiguity. In general, the organizational climate factors were the best predictors of supervisors' role ambiguity.

For workers, job challenge was most closely related to role ambiguity. Workers who find their job challenging report less role ambiguity. The organizational climate and general job characteristic factors were the best predictors of role ambiguity, whereas more specific job characteristics predicted role conflict, especially for workers. On-the-job concerns such as ethnic problems, material problems, and wasted material and manhours were all related significantly to role conflict for the workers. It appears that, when problems come up on the job, they lead to role conflict among workers. This is not surprising considering that supervisors are seldom on the job to solve problems.

#### Predictors of Satisfaction and Work Center Performance

Interestingly, role ambiguity was not only related to various organizational variables, but also to intrinsic satisfaction. This is in agreement with Rizzo et al. (1970), who found that satisfaction was more highly related to role ambiguity than to role conflict. Unlike other studies (e.g., Schuler, 1975, 1977a), it was found that the relationship between role ambiguity and intrinsic satisfaction was equally strong for workers and supervisory personnel. This indicates that, if role ambiguity could be reduced, intrinsic satisfaction would increase. For both workers and supervisors, role ambiguity and esprit de corps were the best predictors of intrinsic satisfaction, suggesting that, if esprit de corps were enhanced, satisfaction might improve.

Both role ambiguity and role conflict were highly related to workers' perceptions of the performance of their work center (i.e., an individual's immediate work group and his supervisor). Role stress was not related to supervisors' perceptions of work center performance. This may be due in part to the nature of the job. Workers experiencing role ambiguity or role conflict would be likely to see job quality or job completion as related to stress that prohibits optimal performance on the job. Supervisors, on the other hand, may not see a relationship between their perceived states of role stress and their work

center's performance. This suggests that, if role stress were reduced for workers, work center performance might be improved. If intrinsic satisfaction and work center performance are accepted as valid indicators of effectiveness, it may be inferred that reductions in role stress would lead to increased effectiveness.

#### RECOMMENDATIONS

- 1. Workers at the Public Works Centers (PWCs) expressed more role ambiguity than did those in supervisory and managerial positions. Therefore, they should be provided with accurate and timely information concerning their work, and supervisors should provide sufficient guidelines for successful job completion.
- 2. In general, managers expressed more role conflict than workers, which may be because of time pressures to complete work. Since these pressures are increased when coordination problems lead to manpower waste, material problems, and planning or scheduling difficulties, steps should be taken to ensure the accuracy of inputs to the control system, which is responsible for disseminating planning and scheduling reports.
- 3. Workers who perceive their supervisor as more competent, more supportive, and less biased experience less role stress. Thus, to ensure that supervisors have these qualities, selection criteria for supervisors should be revised to include interpersonal skills; supervisory training should be provided to improve existing technical, managerial, and interpersonal competence; and performance standards established for supervisors should be expanded to include personnel management responsibilities.
- 4. Perceptions of role ambiguity were related to organizational climate (e.g., openness) and to general job characteristics (e.g., reward contingencies). Thus, the timing and form of communication provided by the control system should be improved to ensure that (a) employees perceive supervisors as willing to provide and receive information and (b) employees receive accurate feedback about their performance.
- 5. Since role stress was related to supervisors' perceptions of managerial practices (e.g., flow of communication, derogation of workers, and bypassing of supervision), managers should be made aware of the possible effect of their policies and procedures on supervisory attitudes and performance. For example, negative consequences may result if a policy aimed at expediting production alienates supervisors.
- 6. Supervisors expressed more role stress when they had less influence than they felt they should have on work matters. Thus, to ensure that supervisors have realistic expectations concerning their influence, the amount of such influence appropriate for different tasks should be clearly defined.

#### REFERENCES

- Allport, G. W., Vernon, P. E., & Lindzey, G. The study of values. Cambridge, MA: Riverside Press, 1960.
- Beehr, T. A. Perceived situational moderators of the relationship between subjective role ambiguity and role strain. Journal of Applied Psychology, 1976, 1, 35-40.
- Beehr, T. A., Walsh, J. T., & Taber, T. D. Relationship of stress to individually and organizationally valued states: Higher order needs as a moderator. <u>Journal of Applied Psychology</u>, 1976, 61(1), 41-47.
- Campbell, J. P., & Beaty, E. E. Organizational climate: Its measurement and relationship to work group performance. Proceedings of the meeting of the American Psychological Association, Washington, DC: September 1971.
- Charters, W. W. A study of role conflict among foremen in a heavy industry. Ann Arbor: Unpublished doctoral dissertation, University of Michigan, 1952.
- Greene, C. N., & Organ, D. W. An evaluation of causal models linking the received role with job satisfaction. Administrative Science Quarterly, 1973, 18, 95-102.
- Hamner, W. C., & Tosi, H. L. Relationship of role conflict and role ambiguity to job involvement measures. Journal of Applied Psychology, 1974, 59(4), 497-499.
- Jenkins, G. P., Nadler, D. A., Lawler, E. E., & Cammann, C. Standardized observations: An approach to measuring the nature of jobs. <u>Journal of Applied Psychology</u>, 1975, <u>60</u>, 171-180.
- Johnson, T. W., & Graen, G. Organizational assimilation and role rejection. Organizational Behavior and Human Performance, 1973, 10, 72-87.
- Johnson, T. W., & Stinson, J. E. Role ambiguity, role conflict, and satisfaction: Moderating effects of individual differences. <u>Journal of Applied Psychology</u>, 1975, 60(3), 329-333.
- Kahn, R. L., Wolfe, D. M., Quinn, R. P. Shoek, J. B., & Rosenthal, R. A. Organizational stress: Studies in role conflict and ambiguity. New York: Wiley, 1964.
- Keller, R. T. Role conflict and ambiguity: Correlates with job satisfaction and values. Personnel Psychology, 1975, 28, 57-64.
- Lyons, T. F. Role clarity, need for clarity, satisfaction, tension, and withdrawal. Organizational Behavior and Human Performance, 1971, 6, 99-110.
- Miles, R. H. A comparison of the relative impacts of role perceptions of ambiguity and conflict by role. Academy of Management Journal, 1976, 19(1), 25-35.
- Riedel, J. A., Sheposh, J. P., & Young, L. E. A cross-cultural investigation of organizational functioning (NPRDC Tech. Rep. 79-9). San Diego: Navy Personnel Research and Development Center, February 1979.
- Rizzo, J. R., House, R. J., & Lirtzman, S. I. Role conflict and ambiguity in complex organizations. Administrative Science Quarterly, 1970, 15, 150-163.

- Roethlisberger, F. J. The foreman: Master and victim of double talk. <u>Harvard Business</u> Review, 1945, 7, 283-298.
- Rokeach, M. The nature of human values. New York: The Free Press, 1973.
- Schuler, R. S. Role perceptions, satisfaction, and performance: A partial reconciliation. Journal of Applied Psychology, 1975, 60(6), 683-687.
- Schuler, R. S. Role perceptions, satisfaction, and performance moderated by organization level and participation in decision making. Academy of Management Journal, 1977, 20(1), 159-165. (a)
- Schuler, R. S. The effects of role perceptions on employee satisfaction and performance moderated by employee ability. Organizational Behavior and Human Performance, 1977, 18, 98-107. (b)
- Sims, H. P., Jr., & Szilagyi, A. D. Leader structure and subordinate satisfaction for two hospital administrative levels: A path analysis approach. <u>Journal of Applied Psychology</u>, 1975, 60(2), 194-197.
- Tosi, H. Organization stress as a moderator of the relationship between influence and role response. Academy of Management Journal, 1971, 14, 7-20.
- White, K. J., & Ruh, R. A. Effects of personal values on the relationship between participation and job attitudes. <u>Administrative Science Quarterly</u>, 1973, 18, 506-514.
- Wispe, L. G., & Thayer, P. W. Role ambiguity and anxiety in an occupational group. Journal of Social Psychology, 1957, 46, 41-48.

## APPENDIX A

## **WORKER QUESTIONNAIRE (FORM A)**

D	Demographics
OC	Organizational Climate
SJC	Specific Job Characteristics
POS	Perceptions of Supervisors
SI	Supervisory Influence
RS	Role Stress
GJC	General Job Characteristics
GJC(W)	General Job Characteristics (Workers Only)
MP	Managerial Practices
JS	Job Satisfaction
CV	Cultural Values
JV	Job Values
E	Effectiveness

## NAVY PUBLIC WORKS CENTER ATTITUDE INVENTORY

#### FORM A

The purpose of this survey is to obtain information on the attitudes and opinions of Public Works Center employees regarding their work. It is anticipated that the results derived from your responses will be used to improve the quality of working life and productivity in the Navy Public Works Centers.

For this survey to be of value it is necessary that you be as frank and thoughtful as possible in responding to the items in this questionnaire.

Thank you for your cooperation.



## PRIVACY ACT STATEMENT

Information concerning your opinions is requested under authority of 57 USC 301 as reflected in OPNAV Notice 5450 of 17 April 1975. This information will be used by NAVPERSRANDCEN to recommend methods of enhancing PWC effectiveness. The information provided will be combined with that provided by other individuals. Individual responses will not be made available to anyone. You are not required to provide this information; your participation is voluntary.

#### Developed by:

The Navy Personnel Research and Development Center San Diego, California 92152

D	1.	Wh	What is your job title (that which is listed on your position description)?						
D	2.	Wha	at work center are you assigned	to?					
			at is the code number?						
D	3.		How long have you worked in the PWC system?						
D	4.		w long have you worked at this						
D	5.		9						
D		-		If no spec	ifv				
D	7.	Hov	Are you an American citizen?If no, specify  How many dependents do you have? (Others who depend on your income for financial support)?						
D	8.	Hav	Have you ever served in the U. S. Armed Forces?						
			If yes, which branch?						
			How long did you serve?						
	CIR		the letter next to your answer.						
D	9.	Sex							
		А. В.	Male Female						
D	10.	The following is a list of ethnic backgrounds for people who work at PWCs. Please CIRCL the one that comes closest to describing your ethnic background.							
		A. B.	Anglo-Saxon Black or Afro-American	G. Н.		Chinese Japanese			
		C.				Hawaiian			
		E. F.	Filipino Samoan	K.		Mediterranean Slavic			
D	11.	Wha	it is your education level? (CIR	CLE the higher	est	grade completed)			
		A. B.	Some elementary school (grad Completed elementary school Some high school (9 to 11 year	es 1 to 7) (8 grades)					

- - Graduated from high school or General Educational Development (GED)
  - E. Some college or technical training beyond high school (1 to 3 years)
  - Graduated from college or university (B.A., B.S., or other bachelor's degree)
  - G. Some graduate school
- D 12. How many more years do you plan to work before leaving or retiring from U.S. Government employment? (CIRCLE your answer)
  - A. Less than five years

D. 16-20

В. 6-10 E. 21 years or more

C. 11-15 The following group of items are general questions about working at this PWC. Please CIRCLE the letter in front of the best answer to each item.

oc 1.		OC 7. penness	To what extent do workers have confidence in management's judgment?
	<ul><li>well you do your job?</li><li>A. To a very great extent</li><li>B. To a great extent</li><li>C. To some extent</li><li>D. To a small extent</li></ul>		<ul><li>A. To a very great extent</li><li>B. To a great extent</li><li>C. To some extent</li><li>D. To a small extent</li><li>E. Not at all</li></ul>
GJC 2.	To what extent does your job require full use of your skills	oc 8.	In this Center about the only source of information on important matters is the grapevine (rumor).
	and abilities?  A. To a very great extent B. To a great extent C. To some extent D. To a small extent E. Not at all	00 0	<ul><li>A. Strongly agree</li><li>B. Agree</li><li>C. Not sure</li><li>D. Disagree</li><li>E. Strongly disagree</li></ul>
OC 3. Openness		OC 9. penness	To what extent is your immediate supervisor willing to listen to your problems?
	<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>		<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>
OC 4. Openness	To what extent does cooperation exist between departments at this	OC 10. Esprit	Do people who work here "goof off" if they are not watched?
	exist between departments at this Center?  A. To a very great extent B. To a great extent C. To some extent D. To a small extent		
	exist between departments at this Center?  A. To a very great extent B. To a great extent C. To some extent D. To a small extent E. Not at all	Esprit de	they are not watched?  A. Almost no one "goofs off" B. A few "goof off" C. About half "goof off" D. A lot "goof off"
Openness	exist between departments at this Center?  A. To a very great extent B. To a great extent C. To some extent D. To a small extent E. Not at all  To what extent does a cooperative atmosphere exist among people you work with?  A. To a very great extent B. To a great extent C. To some extent D. To a small extent	Esprit de Corps OC 11.	they are not watched?  A. Almost no one "goofs off" B. A few "goof off" C. About half "goof off" D. A lot "goof off" E. Almost everyone "goofs off" To what extent do you have to "toe the line" at this Center?  A. To a very great extent B. To a great extent C. To some extent D. To a small extent E. Not at all
Openness  OC 5.	exist between departments at this Center?  A. To a very great extent B. To a great extent C. To some extent D. To a small extent E. Not at all  To what extent does a cooperative atmosphere exist among people you work with?  A. To a very great extent B. To a great extent C. To some extent D. To a small extent	Esprit de Corps OC 11.	they are not watched?  A. Almost no one "goofs off" B. A few "goof off" C. About half "goof off" D. A lot "goof off" E. Almost everyone "goofs off" To what extent do you have to "toe the line" at this Center?  A. To a very great extent B. To a great extent C. To some extent D. To a small extent

OC Esprit de Corps	13.	de corps (workgroup pride) among the employees at this PWC?  A. To a very great extent B. To a great extent C. To some extent			How would you describe this PWC?  A. Very efficient B. Efficient C. Moderately efficient D. Not very efficient E. Totally inefficient  This PWC is:
		E. Not at all  Which of the following is most important in getting promoted?  A. Seniority B. Competence or ability C. Personal relationships D. The department you're in E. Work output  following group of questions deal with specific processing the senior of the senio			<ul><li>A. Very up-to-date</li><li>B. Up-to-date</li><li>C. Moderately up-to-date</li><li>D. Old fashioned</li><li>E. Very old fashioned</li></ul>
		ont of the best answer to each item.	scilic p		
GJC(w) Job Performan GJC(w) Time Constrain	nce	pared to handle surprising or unpredictable situations.  A. Very descriptive of your job B. Descriptive of your job C. Somewhat descriptive D. A little descriptive of your job E. Not at all descriptive of your job You are frequently interrupted for nonwork-related reasons.  A. Very descriptive of your job B. Descriptive of your job C. Somewhat descriptive	IC(w) (ob form-	6. 7.	This job permits no free time.  A. Very descriptive of your job B. Descriptive of your job C. Somewhat descriptive D. A little descriptive of your job E. Not at all descriptive of your job Doing this job gives me a feeling of accomplishment.  A. Very descriptive of your job B. Descriptive of your job C. Somewhat descriptive D. A little descriptive of your job E. Not at all descriptive of your job Workers in this work center have good
GJC(w)	3.	Your job allows you to determine your own work pace.  A. Very descriptive of your job B. Descriptive of your job C. Somewhat descriptive	C(w) {	8.	working conditions.  A. Very descriptive of your job B. Descriptive of your job C. Somewhat descriptive D. A little descriptive of your job E. Not at all descriptive of your job The job requires me to use a number of
GJC(w) Time Constrain		You are frequently asked to do excessive amounts of work.  A. Very descriptive of your job B. Descriptive of your job C. Somewhat descriptive D. A little descriptive of your job E. Not at all descriptive of your job			complex or high-level skills.  A. Very descriptive of your job B. Descriptive of your job C. Somewhat descriptive D. A little descriptive of your job E. Not at all descriptive of your job

(w)	<ul> <li>The job requires a lot of cooperative work with other people.</li> <li>A. Very descriptive of your job</li> <li>B. Descriptive of your job</li> <li>C. Somewhat descriptive</li> <li>D. A little descriptive of your job</li> <li>E. Not at all descriptive of your job</li> </ul>	GJC 15. Job Challenge	The job itself is significant and important in the broader scheme of things.  A. Very descriptive of your job B. Descriptive of your job C. Somewhat descriptive D. A little descriptive of your job E. Not at all descriptive of your job
GJC 10. (w)		16.	To what extent are you satisfied with this job?  A. To a very great extent B. To a great extent C. To some extent D. To a small extent E. Not at all  To what extent do you feel a very high degree of personal responsibility for
11.	The supervisors on this job hardly ever give me any "feedback" about how well I am doing in my work.  A. Very descriptive of your job B. Descriptive of your job C. Somewhat descriptive D. A little descriptive of your job E. Not at all descriptive of your jo	b 18.	the work you do on this job?  A. To a very great extent B. To a great extent C. To some extent D. To a small extent E. Not at all  To what extent do you personally care
GJC 12. (w)	This job is one where a lot of other people can be affected by how well the work gets done.  A. Very descriptive of your job B. Descriptive of your job C. Somewhat descriptive D. A little descriptive of your job	19.	how well the job gets done.  A. To a very great extent B. To a great extent C. To some extent D. To a small extent E. Not at all  To what extent do differences in language hinder getting the job done?
GJC 13. (w) GJC 14. Job Challenge	E. Not at all descriptive of your job The job denies me any chance to use my personal initiative or judgment in carrying out the work.  A. Very descriptive of your job B. Descriptive of your job C. Somewhat descriptive D. A little descriptive of your job E. Not at all descriptive of your job The job gives me considerable op- portunity for independence and freedom in how I do the work.  A. Very descriptive of your job B. Descriptive of your job C. Somewhat descriptive D. A little descriptive of your job E. Not at all descriptive of your job E. Not at all descriptive of your job	GJC 20. (w)	A. To a very great extent B. To a great extent C. To some extent D. To a small extent E. Not at all To what extent are you hindered from doing a good job by poor equipment or lack of equipment? A. To a very great extent B. To a great extent C. To some extent D. To a small extent E. Not at all

SJC Material	21.	How safe is the equipment which supplied to you?	is SJC 27	<ol> <li>To what extent does damaged material delivered contribut to material waste in</li> </ol>
SJC	22.	<ul> <li>A. Very safe</li> <li>B. Quite safe</li> <li>C. Moderately safe</li> <li>D. Unsafe</li> <li>E. Very unsafe</li> <li>F. Not sure</li> <li>In general you get the material an</li> </ul>	Waste d	this PWC?  A. To a very great extent B. To a great extent C. To some extent D. To a small extent E. Not at all F. Not sure
Material		supplies you need to do the job.	SJC 28	3. To what extent does having the wrong
		<ul><li>A. Strongly agree</li><li>B. Agree</li><li>C. Not sure</li><li>D. Disagree</li><li>E. Strongly disagree</li></ul>	Material Waste	material delivered contribute to material waste in this PWC?  A. To a very great extent  B. To a great extent  C. To some extent
SJC Material	23.	To what extent do people in the Material Department get the proposition material to the job site?	er	D. To a small extent E. Not at all F. Not sure
		A. To a very great extent B. To a great extent C. To some extent	SJC 29 Material Waste	<ul> <li>To what extent does theft contribute to material waste in this PWC?</li> <li>A. To a very great extent</li> </ul>
		<ul><li>D. To a small extent</li><li>E. Not at all</li><li>F. Not sure</li></ul>		B. To a great extent C. To some extent D. To a small extent
SJC	24.	How much time do you spend on the job waiting for material to arrive?	00	E. Not at all F. Not sure
		A. A great deal	SJC 30	<ul> <li>To what extent does stockpiling of material (goldpiling) occur in this PWC?</li> </ul>
		B. Quite a bit C. Some D. Little E. None F. Not sure	Waste	<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>
SJC 2 Material	25.	How much material do you see being wasted at PWC?	0.70 01	F. Not sure
Waste		A. A great deal B. Quite a bit	SJC 31. Material	material you need in a squeeze or emergency?
		C. Some D. Little E. None F. Not sure		<ul><li>A. Very successful</li><li>B. Quite successful</li><li>C. Somewhat successful</li><li>D. Not very successful</li></ul>
SJC 2	6.	To what extent does difficulty in		E. Not at all successful
Material Waste		turning materials back in contribut		F. Not sure
maste		to material waste in this PWC?  A. To a very great extent	SJC 32. Material	Rate the transportation you use on its safety.
		<ol><li>To a great extent</li></ol>		A. Very safe
		C. To some extent		B. Reasonably safe
		D. To a small extent  E. Not at all		C. Not sure
		Not sure		<ul><li>D. Slightly unsafe</li><li>E. Very unsafe</li></ul>

SJC 33. Vehicles	How frequently do you experience vehicle breakdown?	SJC	39.	is more work scheduled than can be
SJC 34.	<ul> <li>A. Very frequently</li> <li>B. Frequently</li> <li>C. Occasionally</li> <li>D. Seldom</li> <li>E. Almost never</li> <li>F. Not sure</li> <li>How much would better vehicles</li> </ul>			A. Very frequently B. Frequently C. Occasionally D. Seldom E. Almost never F. Not sure
Vehicles	increase PWC productivity?	SJC	40.	Our work center's workload is fairly constant from day to day.
	<ul> <li>A. A great deal</li> <li>B. Quite a bit</li> <li>C. Some</li> <li>D. Little</li> <li>E. There would be no increase</li> <li>F. Not sure</li> </ul>			A. Strongly agree B. Agree C. Not sure D. Disagree E. Strongly disagree
SJC 35. Vehicles		SJC npower Waste	41.	In general, how much time do you see being spent in nonproductive activity in the PWC?
SJC 36.	<ul> <li>A. Strongly agree</li> <li>B. Agree</li> <li>C. Not sure</li> <li>D. Disagree</li> <li>E. Strongly disagree</li> <li>In general, when PWC employees use</li> <li>PWC vehicles they are treated with</li> </ul>			A. A great deal B. Quite a bit C. Some D. Little E. Very little F. Not sure
	A. Strongly agree		42.	In general, which area do you see as causing the most problems for work getting done in your work center?
	<ul><li>B. Agree</li><li>C. Not sure</li><li>D. Disagree</li><li>E. Strongly disagree</li></ul>			<ul><li>A. Material</li><li>B. Equipment</li><li>C. Transportation</li></ul>
SJC 37. Manpower	How frequently are there times when there isn't enough work to do?	SJC	43.	D. Do not know  How much more do you think most people
Waste	A. Very frequently B. Frequently	500		in your work center could produce if they wanted to?
00	C. Occasionally D. Seldom E. Almost never F. Not sure			<ul> <li>A. A great deal more</li> <li>B. Quite a bit more</li> <li>C. Moderately more</li> <li>D. A little more</li> <li>E. People are producing as much as</li> </ul>
SJC 38. Manpower	How frequently are there more workers than needed to accomplish			possible
Waste	the work scheduled?  A. Very frequently B. Frequently C. Occasionally D. Seldom E. Almost never F. Not sure		44.	If you think that there is time wasted at this PWC, list the major reasons you think cause this waste.

# The following questions are about your supervisor. Please CIRCLE the letter in front of the best answer to each question.

- To what extent does your supervisor encourage you to participate in important decisions?
  - A. To a very great extent
  - B. To a great extent
  - C. To some extent
  - D. To a small extent
  - E. Not at all
- 2. To what extent does your supervisor stand up for you or support you?
  - A. To a very great extent
  - B. To a great extent
  - C. To some extent
  - D. To a small extent
  - E. Not at all
- 3. To what extent does your supervisor see to it that you know what has to be done?
  - A. To a very great extent
  - B. To a great extent
  - C. To some extent
  - D. To a small extent
  - E. Not at all
- 4. To what extent does your supervisor help you solve work-related problems?
  - A. To a very great extent
  - B. To a great extent
  - C. To some extent
  - D. To a small extent
  - E. Not at all
- 5. To what extent does your supervisor demand that you do high quality work?
  - A. To a very great extent
  - B. To a great extent
  - C. To some extent
  - D. To a small extent
  - E. Not at all
- 6. To what extent does your supervisor do a good job of judging your performance?
  - A. To a very great extent
  - B. To a great extent
  - C. To some extent
  - D. To a small extent
  - E. Not at all

- 7. To what extent is your supervisor competent?
  - A. To a very great extent
  - B. To a great extent
  - C. To some extent
  - D. To a small extent
  - E. Not at all
- 8. To what extent is your supervisor biased on the basis of race?
  - A. To a very great extent
  - B. To a great extent
  - C. To some extent
  - D. To a small extent
  - E. Not at all
- 9. To what extent does your supervisor show favoritism?
  - A. To a very great extent
  - B. To a great extent
  - C. To some extent
  - D. To a small extent
  - E. Not at all
- 10. How well does your supervisor know the technical parts of his or her job?
  - A. Knows them very well
  - B. Knows them guite well
  - C. Knows them somewhat
  - D. Doesn't know much
  - E. Knows nothing
- 11. How well does your supervisor know the administrative parts of his or her job?
  - A. Knows them very well
  - B. Knows them guite well
  - C. Knows them somewhat
  - D. Doesn't know much
  - E. Knows nothing
- 12. To what extent does your supervisor help you develop your skills?
  - A. To a very great extent
  - B. To a great extent
  - C. To some extent
  - D. To a small extent
  - E. Not at all

13.	praise good work?  A. To a very great extent				keep poor performers from getting rewarded?		
	B. C. D. E.	To a great extent To a great extent To some extent To a small extent Not at all			A. B. C. D. E.	To a very great extent To a great extent To some extent To a small extent Not at all	
		wing group of questions deal wit ease CIRCLE the letter in front				ings you have about your day-to-day to each item.	
1.	com		GJC Reward	5.		v likely is it that a person who does our job will be reprimanded?	
	A. B.	My job is <u>much more</u> important than my other interests. My job is <u>somewhat more</u> important than my other interests.	r-	les	A. B. C. D. E.	Extremely likely Likely Somewhat likely Unlikely Extremely unlikely	
	<ul> <li>C. My job is <u>somewhat less</u> important than my other interests.</li> <li>D. My job is <u>much less</u> important than my other interests.</li> </ul>	GJC Pay & Fringe Benefit		peop	pay is fair considering what other ple in this organization are paid.  Strongly agree		
2.		had the chance, I would take a grent job within this organization Strongly agree		.8	B. C. D. E.	Agree Not sure Disagree Strongly disagree	
	B. C. D. E.	Agree Not sure Disagree Strongly disagree	GJC Pay & Fringe Benefit	7.	My in si mak	pay is fair considering what people milar jobs in private industry are ing.	
3.		ould like to look for a new job ne next year.			A. B. C.	Strongly agree Agree Not sure	
	A. B. C. D. E.	Definitely I might Not sure I doubt it Definitely not	GJC	8.	are t	Disagree Strongly disagree fringe benefits for working at a PWC netter than one would get in private stry.	
Reward		likely is it that a person who a good job will be rewarded?			A. B.	Strongly agree Agree	
Conten- gencies	A. B. C. D. E.	Extremely likely Likely Somewhat likely Unlikely Extremely unlikely			C. D. E.	Not sure Disagree Strongly disagree	

		To a ve great extent (A)		To a great extent (B)	To some extent (C)	To a small extent (D)	Not at all (E)
	and	what extent do management the local workforce agree on (CII following issues:	RCLE	one lette	er on each lin	e for your	answer)
oc		Supervisory practices A		В	С	D	E
Work- force/		Problems facing this PWC A		В	С	D	E
Manage- <		Individual value systems A		В	С	D	E
ment		The way the world is viewed A		В	С	D	E
Agree- ment	13.	The way people are viewed A		В	С	D	E
		m the following list, please WRITE in the space LEAST IMPORTANT items in terms of the Most Important					TANT and
	14.		_ A.	Respe	ct from cowo	rkers	
	15.		<b>.</b> B.	Feelin	g of accompl	ishment	
	16		_ C.	Pay			
JV		Least Important	D.	Chanc	es for getting	ahead	
	17		<b>.</b> E.	Job se	curity		
	18		- F.	Oppor	tunity to dev	elop your	skills
	19.		<b>-</b> G.	Recog	nition		
			Н.	Seeing	the results o	f your wo	rk
			١.	Having	g a job you do	on't take h	ome
JS Intrins	20. ic	How satisfied are you with the respect you receive from the Extrinsi	<b>22</b> .	of pay	atisfied are ye you get?	ou with th	e amount
		people you work with?  A. Very satisfied B. Satisfied C. Neither satisfied nor dissatisfied D. Dissatisfied E. Very dissatisfied Js	23.	B. S C. N D. D E. V	Yery satisfied atisfied leither satisfied lissatisfied Yery dissatisfied atisfied are ye	ed	
JS Intrinsi	21. lc	How satisfied are you with the Intrinsi chances you have to accomplish something worthwhile?		chance A. V	es for getting ery satisfied		
		<ul><li>A. Very satisfied</li><li>B. Satisfied</li><li>C. Neither satisfied nor dissatisfied</li></ul>		C. N D. D	atisfied leither satisfie vissatisfied 'ery dissatisfie		atisfied
		D. Dissatisfied JS E. Very dissatisfied Extrinsic	24.		atisfied are yo security you		e amount
				B. Sa C. N D. D	ery satisfied atisfied either satisfie issatisfied ery dissatisfie		atisfied

JS 25. Intrinsic	How satisfied are you with the RS 31. opportunity to develop your skills Conflict and abilities?	To what extent do you do things that are likely to be accepted by one person and not accepted by others?
	<ul> <li>A. Very satisfied</li> <li>B. Satisfied</li> <li>C. Neither satisfied nor dissatisfied</li> <li>D. Dissatisfied</li> <li>E. Very dissatisfied</li> </ul>	<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>
JS 26. Intrinsic	How satisfied are you with RS 32. recognition for doing the job? Ambiguity	To what extent do you know if your work will be acceptable to your boss?
	<ul> <li>A. Very satisfied</li> <li>B. Satisfied</li> <li>C. Neither satisfied nor dissatisfied</li> <li>D. Dissatisfied</li> <li>E. Very dissatisfied</li> </ul>	<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>
JS 27. Instinsic	How satisfied are you with seeing RS 33. the results from your work? Conflict	To what extent is it difficult to satisfy everybody at the same time?
	<ul> <li>A. Very satisfied</li> <li>B. Satisfied</li> <li>C. Neither satisfied nor dissatisfied</li> <li>D. Dissatisfied</li> <li>E. Very dissatisfied</li> </ul>	<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>
JS 28.	How satisfied are you with having a job you don't take home?  RS 34. Conflict	To what extent do you have to break rules to get everything done on your job?
	<ul> <li>A. Very satisfied</li> <li>B. Satisfied</li> <li>C. Neither satisfied nor dissatisfied</li> <li>D. Dissatisfied</li> <li>E. Very dissatisfied</li> </ul>	<ul><li>A. To a very great extent</li><li>B. To a great extent</li><li>C. To some extent</li><li>D. To a small extent</li><li>E. Not at all</li></ul>
RS 29. Conflict	F. I do take work home RS 35.  To what extent do you work under Conflict conflicting policies and guidelines?	To what extent do people ask you to do things on your job which get in the way of your work?
	<ul><li>A. To a very great extent</li><li>B. To a great extent</li><li>C. To some extent</li><li>D. To a small extent</li><li>E. Not at all</li></ul>	<ul><li>A. To a very great extent</li><li>B. To a great extent</li><li>C. To some extent</li><li>D. To a small extent</li><li>E. Not at all</li></ul>
RS 30. Conflict	To what extent do you receive RS 36. assignments without the manpower Ambiguity to complete them?	To what extent do you feel certain about how much authority you have?
	A. To a very great extent B. To a great extent C. To some extent D. To a small extent E. Not at all	<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>

RS 37. Ambiguity	To what extent do you know what RS 41. your responsibilities are? Ambiguity	To what extent are explanations clear about what has to be done?
RS 38. Ambiguity	<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> <li>To what extent do you feel certain RS 42. about how you will be evaluated for Ambiguity</li> </ul>	<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> <li>To what extent are you given enough time to do what is expected of</li> </ul>
PC as	a raise or promotion?  A. To a very great extent B. To a great extent C. To some extent D. To a small extent E. Not at all	you on your job?  A. To a very great extent B. To a great extent C. To some extent D. To a small extent E. Not at all
RS 39. Ambiguity	To what extent do you know exactly RS 43. what is expected of you? Conflict	To what extent does it seem like you have too much work for one person to do?
	<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>	<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>
RS 40.	To what extent do you know that you have divided your time properly?	To what extent are the performance standards on your job too high?
	<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>	<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>
	of the next four questions is followed by five answers e spaces provided for each question.	ver spaces. Please WRITE your answers
1.	What are some of the specific things which occur a working?	t work that make you feel good about
	A	
	B	
	С.	
	D	
	E	

	gry?
Α.	
В.	
c.	
D.	
E.	
lf life	you had your way and could do anything, what things would you do to make your work
	s Detter:
В.	
_	
C.	
D.	
E.	
pro	you had your way and could do anything, what things would you do to improve the oductivity of this PWC?
A.	
В.	
c.	
D.	

## Please CIRCLE the letter in front of the best answer for each item.

oc 1.	Overall, what effect do unions have on the PWC operation?	6.	To what extent is the "command interest" category abused?		
	<ul> <li>A. Very positive</li> <li>B. Positive</li> <li>C. No effect</li> <li>D. Negative</li> <li>E. Very negative</li> <li>F. No opinion</li> </ul>		<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> <li>F. Do not know</li> </ul>		
OC 2. Problems	To what extent does employee theft present a problem at your PWC?	7.	To what extent does work on "command interest" jobs interfere with everyday work accomplishments?		
	<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>		<ul><li>A. To a very great extent</li><li>B. To a great extent</li><li>C. To some extent</li><li>D. To a small extent</li><li>E. Not at all</li></ul>		
OC 3. Problems	To what extent do you think there are problems between	oc 8.	F. Do not know  What effect does military turnover have		
110010	people of different ethnic back- grounds in your work center?	00 0.	on the effectiveness of this PWC?		
	A. To a very great extent B. To a great extent C. To some extent D. To a small extent E. Not at all		<ul> <li>A. Very positive</li> <li>B. Positive</li> <li>C. No effect either way</li> <li>D. Negative</li> <li>E. Very negative</li> <li>F. Do not know</li> </ul>		
OC 4. Problems	To what extent do problems betwe people of different ethnic back- grounds hurt your work center's	What effect does military management have on vertical communications both up and down?			
	performance?  A. To a very great extent B. To a great extent C. To some extent D. To a small extent E. Not at all	Management	<ul> <li>A. Communications are improved greatly</li> <li>B. Communications are improved to some extent</li> <li>C. There is no effect on communications</li> <li>D. Communications are hampered</li> </ul>		
5.	In what way do you think "comma interest" jobs affect productivity at this PWC?	nd	slightly  E. Communications are hampered greatly		
	<ul> <li>A. Greatly increase productivity</li> <li>B. Slightly increase productivity</li> <li>C. Do not affect productivity</li> <li>D. Slightly decrease productivity</li> <li>E. Greatly decrease productivity</li> <li>F. Do not know</li> </ul>	OC 10. Perceptions of Military Management	F. Do not know In general, the opinion of military toward civilians is: A. Very high B. High C. Neutral D. Low E. Very low		

Percepti		In general, the opinion of civilians toward the military is:		15.	In general, most people who work for this PWC like to work overtime.					
of Milit Manageme		<ul><li>A. Very high</li><li>B. High</li><li>C. Neutral</li><li>D. Low</li><li>E. Very low</li></ul>			A. B. C. D. E.	Ofter	etimes Y			
OC Percepti	12. ons	Overall, rate military management in terms of their ability	ос	16.			overtime ployees.	is distrib	outed fa	irly
Management A. Very good B. Good C. Fair D. Poor		B. Good C. Fair D. Poor			A. B. C. D. E.	Ofter	etimes Y			
						general, rate your work center in erms of how well it does its job.				
OC 13. Overall, rate the military management in terms of their financial management skills.  Management  A. Very good B. Good C. Fair D. Poor E. Very poor F. No opinion					A. Very good B. Good C. Fair D. Poor E. Very poor					
OC Perception	ary	To what extent do you see military management as being necessary for the successful operation of this PWC?								
Managemen	nt	<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>								
					G	ery ood A)	Good (B)	Fair (C)	Poor (D)	Very Poor (E)
		your work center in terms of how well es in the following areas:			(CIRCLE one letter on each					1
	18.	Productivity—amount and quality of wor accomplished for money and time spent.	k			Α	line for y B	our ans	wer.) D	E
Е	19.					A	В	С	D	E
	20.	Adaptability—ability to meet changing conditions and demands.				А	В	С	D	E
	21.	Customer Satisfaction—extent to which customers are satisfied with PWC performance.				Д	В	С	D	E

## The following group of items deal with your feelings about life in general. Please CIRCLE the letter in front of the best answer for each item.

- Obedience and respect for authority.
  - A. Very important
  - B. Important
  - C. Somewhat important
  - D. Slightly important
  - E. Not at all important
- Working hard to improve the prestige and status of one's group.
  - A. Very important
  - B. Important
  - C. Somewhat important
  - D. Slightly important
  - E. Not at all important
- 3. Getting recognition for one's achievements.
  - A. Very important
  - B. Important
  - C. Somewhat important
  - D. Slightly important
  - E. Not at all important
- 4. Prestige. To become well-known to obtain recognition, awards or high social status.
  - A. Very important
  - B. Important
  - C. Somewhat important
  - D. Slightly important
  - E. Not at all important
- 5. Wealth. To earn a great deal of money.
  - A. Very important
  - B. Important
  - C. Somewhat important
  - D. Slightly important
  - E. Not at all important
- Security. To achieve a secure and stable position in work and financial situation.
  - A. Very important
  - B. Important
  - C. Somewhat important
  - D. Slightly important
  - E. Not at all important

- 7. <u>Self-realization</u>. To get the most from one's personal development.
  - A. Very important
  - B. Important
  - C. Somewhat important
  - D. Slightly important
  - E. Not at all important
- 8. Duty. To dedicate oneself totally to ideals and principles.
  - A. Very important
  - B. Important
  - C. Somewhat important
  - D. Slightly important
  - E. Not at all important
- Pleasure. To enjoy life, to be happy and content, to have the good things in life.
  - A. Very important
  - B. Important
  - C. Somewhat important
  - D. Slightly important
  - E. Not at all important

# From the following list, please write in the space provided the four MOST IMPORTANT and four LEAST IMPORTANT things for a person to be.

CV

1011	LE	Most Important	on to be.			
11. 12. 13. 14. 15		Most Important  Least Important	B. C. D. E. F. G. H. J. K. M. N. O.		Oper Capa Forg Help Chee Clear Cour Hone Indep Self- Covin Obec Resp	iving ful erful n rageous est pendent disciplined ligent ng dient onsible
Plea	se C	IRCLE the letter in front of the best	P. answer to		Politi each	
	Are in d	e you encouraged to participate decisions that affect you?			Good	d ideas don't get communicated and because top management is very approachable.
	D. E.	To a great extent To some extent To a small extent Not at all			A. B. C. D.	Strongly agree Agree Not sure Disagree
2.		ne people are given special rileges.	6.		How	Strongly disagree frequently are suggestions made
3.	D. E.	, 9			A. B. C.	p management Very frequently Frequently Occasionally Seldom Almost never
		kers who are usually blamed.	7.		Sugge	estions made to top managemente fair evaluation.
	В.	Strongly agree Agree Not sure Disagree Strongly disagree		(	A	Almost always Often Sometimes Rarely
4.	even	ormation is withheld from workers, a though it is readily available and ld help.		-		Never
	A. B. C. D.	Almost always Often Sometimes Rarely				

Never

- Management and supervisors set up interrelated jobs and work activities so that the work flows smoothly.
  - A. Strongly agree
  - B. Agree
  - C. Not sure
  - D. Disagree
  - E. Strongly disagree
- Workers are given direct orders by someone other than immediate supervisors.
  - A. Almost always
  - B. Often
  - C. Sometimes
  - D. Rarely
  - E. Never
- 10. Management bypasses levels below them in assigning work.
  - A. Almost always
  - B. Often
  - C. Sometimes
  - D. Rarely
  - E. Never
- 11. Top management is interested in ideas and suggestions from people at different levels in the organization.
  - A. Almost always
  - B. Often
  - C. Sometimes
  - D. Rarely
  - E. Never
- When problems are encountered, those in authority make prompt decisions or recommendations.
  - A. Almost always
  - B. Often
  - C. Sometimes
  - D. Rarely
  - E. Never

- 13. In general, how would you rate the customer's understanding of how the PWC operates?
  - A. Very good
  - B. Good
  - C. Fair
  - D. Poor
  - E. Very poor
  - F. Do not know
- 14. How often do job changes requested by customers cause unnecessary hardship on the efficiency of PWC?
  - A. Almost always
  - B. Often
  - C. Sometimes
  - D. Rarely
  - E. Never

		To a very great extent (A)	To a great extent (B)	To some extent (C)	To a small extent (D)	Not at all (E)	Don't Know (F)	
change	at extent could job es initiated by the ner be avoided if:	(CIRCL	E one lette	er on each tir	ne for your	answer.)		
b	ustomers provided a etter description f the work.	А	В	С	D	E	F	
cl	dustomers didn't hange their minds p often.	Α	В	С	D	E	F	
te	fanagement would each customers about ne PWC operation.	Α	В	С	D	E	F	
b	here was better ommunication etween customers nd planning.	Α	В	С	D	E	F	
10 T	a what aytant is the quali	•••	21	To what a	tont ore a	ontroctors.	auglusted.	

- 19. To what extent is the quality of work performed by contractors better than that of PWC?
  - A. To a very great extent
  - B. To a great extent
  - C. To some extent
  - D. To a small extent
  - E. Not at all
  - F. No opinion
- 20. PWC ends up having to redo much of a contractor's job.
  - A. Almost always
  - B. Often
  - C. Sometimes
  - D. Rarely
  - E. Never
  - F. Do not know

- 21. To what extent are contractors evaluated on the same standards of performance as PWCs?
  - A. To a very great extent
  - B. To a great extent
  - C. To some extent
  - D. To a small extent
  - E. Not at all
  - F. Do not know

		Great deal (A)	Good deal (B)	Somewhat (C)	Not at all (D)	Not involved in my work (E)
code	what extent are the following es (departments) helpful to in getting your work done?	(CIR	CLE the le	etter on each lir	ne for your	answer.)
1.	110-Activity Civil Engineer Office	Α	В	С	D	E
2.	130-Management Office	Α	В	С	D	E
3.	140-Civilian Personnel Office	Α	В	С	D	E
4.	150-Comptroller Office	Α	В	С	D	E
5.	160-Housing Office	Α	В	С	D	E
6.	200-Engineering Department	Α	В	С	D	E
7.	300-Maintenance Control Department	Α	В	С	D	E
8.	500-Maintenance Department	Α	В	С	D	E
9.	600-Utilities Department	Α	В	С	D	E
10.	700-Transportation Department	Α	В	С	D	E
11.	800-Material Department	Α	В	С	D	E
12.	If you have difficulty working w	ith another	work cent	er, name it and	list the rea	sons.

13	HOW	familiar	are vou	with	PMS2
13.	HOW	Idillillai	are you	WILLI	LIMIO:

- A. Very familiar
- B. Familiar
- C. Somewhat familiar
- D. Not very familiar
- E. Never heard of it

### The actual time charge to a job reflects the actual hours worked on the job.

- A. Almost always
- B. Often
- C. Sometimes
- D. Rarely
- E. Almost never

# 15. How often do P&Es plan and estimate jobs within their own trade?

- A. Very frequently
- B. Frequently
- C. Not sure
- D. Seldom
- E. Almost never

## 16. To what extent do P&Es know about the latest developments in their field?

- A. To a very great extent
- B. To a great extent
- C. To some extent
- D. To a small extent
- E. Not at all
- F. Do not know

17	In general, P&Es are tra to do the work required				Is the ratio of P&E hours to production hours set by NAVFAC realistic?				
	<ul><li>A. Strongly agree</li><li>S. Agree</li><li>C. Not sure</li><li>D. Disagree</li><li>E. Strongly disagree</li></ul>				B. 1	Yes No Not sure			
		To a very great extent (A)	To a great extent (B)	ex	some tent (C)	To a small extent (D)	Not at all (E)	Don't know (F)	
char wha	te often there are nges in the job. To at extent is this a alt of:	(CII	RCLE one	e lette	er on e	each line for	your answe	er.)	
19.	A customer changing his mind	Α	В		С	D	E	F	
20.	Poor planning and estimating	А	В		С	D	E	F	
21.	Poor job description from ACE	А	В		С	D	E	F	
22.	A fact of life due to the nature of rehabil- itative construction work	А	В		С	D	E	F	
23.	Poor quality of work	А	В		С	D	E	F	
24.				27. 3 s					
25.	C. Not sure  How often should a P&E job site and see what nee done?			(	C. N	igree lot sure lisagree trongly disag	ree		
	<ul><li>A. Very frequently</li><li>B. Frequently</li><li>C. Not sure</li><li>D. Seldom</li><li>E. Almost never</li></ul>		2	h A E	nelpful A. T B. T	at extent are lin getting the oa very great oa great extentos some extentos	e work do extent ent	ans ne?	
26.	How often do P&Es visit	the job site?			D. T	o a small exte			
	<ul><li>A. Very frequently</li><li>B. Frequently</li><li>C. Not sure</li><li>D. Seldom</li><li>E. Almost never</li></ul>					ot at all o not know			

			E. F.	Not at all Not sure			E.	Strongly d	sagree	
		30.	-	uld the schedulers be located he shops or centrally located?						
			A. B. C.	In the shops Centrally located No opinion						
						A great deal (A)	Quite a lot (B)	Some- thing (C)	Little (D)	Nothing (E)
			e to s	ch <u>does</u> your supervisor ay in making decisions		(CIRCLE	E one let	ter on each	line for yo	our answer.)
	- 1	32.	Hov	v you do your work		Α	В	С	D	E
	Task	33.	Sch	eduling your work activities		Α	В	С	D	E
		34.		v to handle problems you face our work	;	Α	В	С	D	E
		35.	Hiri	ng of people		Α	В	С	D	E
SI		36.	Pay	raises		Α	В	С	D	E
31	Person-	37.	Firi	ng people		Α	В	С	D	E
	nel	38.	Pro	moting people		Α	В	С	D	E
		39.	Whe	en people take time off		Α	В	С	D	E

29. To what extent are the job

B. To a great extent

D. To a small extent

C.

To some extent

40. What you should do when something unexpected happens

41. Settling disagreements

Task

schedules that are set up, meet the work required?

To a very great extent

31. When people from the different depart-

the work activities are well planned.

Strongly agree

Agree

Not sure

Disagree

С

D

A.

В.

C.

D.

ments work together to complete a job,

Ε

E

Α

В

			A great extent	Quite a lot	Some	Little	Nothing	
			(A)	(B)	(C)	(D)	(E)	
		much say should your supervisor ally have in making decisions about:	(CIRCLE one letter on each line for your answer.)					
	42.	How you do your work	Α	В	С	D	E	
	43.	Scheduling your work activities	A	В	С	D	E	
	44.	How to handle problems you face in your work	А	В	С	D	E	
	45.	Hiring people	A	В	C	D	E	
SI	46.	Pay raises	А	В	С	D	E	
	47.	Firing people	А	В	C	D	E	
	48.	Promoting people	Α	В	С	D	E	
	49.	When people take time off	А	В	С	D	E	
	50.	What you should do when something unexpected happens	А	В	С	D	E	
	51.	Settling disagreements	А	В	С	D	E	
POS 52. Supervisory Competence		How often does your immediate supervisor check to see how you are doing your job?	Ę		what extent ings measure?			
		<ul><li>A. Very often</li><li>B. Often</li><li>C. Occasionally</li><li>D. Seldom</li><li>E. Almost never</li></ul>		A. B. C. D. E.	, ,	extent xtent	nt x	
POS Supervis Competen		How much does your supervisor know about your on-the-job performance?	Ę	and	In this PWC, to what extent are threats and punishments used as a way to get people to do better work?			
		<ul><li>A. Knows a lot</li><li>B. Knows quite a bit</li><li>C. Knows something</li><li>D. Knows little</li><li>E. Knows very little</li></ul>		A. B. C. D. E.	<ul><li>B. To a great extent</li><li>C. To some extent</li><li>D. To a small extent</li></ul>			
	54.	standards established for your job?	5	in r				
		<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>		A. B. C. D. E.	To a very g To a great To some es To a small Not at all	extent ktent	rt	

		A very great deal of influence (A)	Quite a lot of influence (B)	Some influence (C)	Little influence (D)	Very little influence (E)	Not sure (F)
do t grou actu wha	v much influence the following ups or persons tally have on t happens in Center?	(CIF	RCLE one let	ter on each l			(17)
58.	Navy managers	А	В	С	D	E	F
59.	Civilian managers	Α	В	С	D	E	F
60.	Supervisors	Α	В	С	D	E	F
61.	The workers	A	В	С	D	E	F

## THANK YOU FOR YOUR COOPERATION

### APPENDIX B

## SUPERVISORY PERSONNEL QUESTIONNAIRE (FORM B)

Demographics Organizational Climate D OC Specific Job Characteristics SJC POS Perceptions of Supervisors Supervisory Influence SI Role Stress RS General Job Characteristics GJC GJC(W) General Job Characteristics (Workers Only) Managerial Practices MP Job Satisfaction JS Cultural Values CV Job Values JV Effectiveness E

## NAVY PUBLIC WORKS CENTER ATTITUDE INVENTORY

#### **FORM B**

The purpose of this survey is to obtain information on the attitudes and opinions of Public Works Center employees regarding their work. It is anticipated that the results derived from your responses will be used to improve the quality of working life and productivity in the Navy Public Works Centers.

For this survey to be of value it is necessary that you be as frank and thoughtful as possible in responding to the items in this questionnaire.

Thank you for your cooperation.



### PRIVACY ACT STATEMENT

Information concerning your opinions is requested under authority of 57 USC 301 as reflected in OPNAV Notice 5450 of 17 April 1975. This information will be used by NAVPERSRANDCEN to recommend methods of enhancing PWC effectiveness. The information provided will be combined with that provided by other individuals. Individual responses will not be made available to anyone. You are not required to provide this information; your participation is voluntary.

### Developed by:

The Navy Personnel Research and Development Center San Diego, California 92152

			Thirte your answer in the space pro-		
D			e you military or civilian?		
D	2.	Wh	at is your job title (that which is list	ted on you	ur position description)?
D	3.	Wh	at work center are you assigned to?		
			at is the code number?		
D	4.		w long have you worked in the PWC		
D	5.	Но	w long have you worked at this Cen	ter?	
D	6.	Age	e		
D	7.	Are	you an American citizen?If r	no, specify	
D	8.	Ho	w many dependents do you have? ancial support)?	(O	thers who depend on your income for
D	9.	Hav	ve you ever served in the U.S. Arme	d Forces?	
		If y	res, which branch?		
		Ho	w long did you serve?		
	CIR	CLE	the letter next to your answer.		
D	10.	Sex			
		A. B.	Male Female		
D	11.		e following is a list of ethnic backgro one that comes closest to describing		people who work at PWCs. Please CIRCLE nic background.
		A.	Anglo-Saxon	G.	Chinese
		В.	Black or Afro-American	H.	
		C.	Mexican	١.	
		D. E.	Native American Indian Filipino	J. K.	
		F.	Samoan	κ.	Stavic
D	12.	Wha	at is your education level? (CIRCLE	the highe	est grade completed)
		A. B. C. D.	Some elementary school (grades 1 Completed elementary school (8 g Some high school (9 to 11 years) Graduated from high school or Ge	to 7) rades)	
		E.	Some college or technical training	beyond hi	igh school (1 to 3 years)
		F.	Graduated from college or univers		B. S., or other bachelor's degree)
		G. H.	Some graduate school Graduate or professional degree (p		cate)
D	13.				re leaving or retiring from U. S. government
			ployment? (CIRCLE your answer)		2
		A.	Less than five years	D.	16-20
	,	В. С.	6-10 11-15	E.	21 years or more

# The following group of items are general questions about working at this PWC. Please CIRCLE the letter in front of the best answer to each item.

oc 1.	To what extent do rules and regulations interfere with how well you Openn do your job?	
	<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> </ul>	<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>
GJC 2.	E. Not at all  To what extent does your job require full use of your skills and abilities?	OC 8. In this Center about the only source of information on important matters is the grapevine (rumor).
OC 3.	<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>	A. Strongly agree B. Agree C. Not sure D. Disagree E. Strongly disagree  OC 9. To what extent is your immediate super-
Openness	judgment trusted on work matters?	ness visor willing to listen to your problems?  A. To a very great extent
	<ul><li>A. To a very great extent</li><li>B. To a great extent</li><li>C. To some extent</li><li>D. To a small extent</li></ul>	B. To a great extent C. To some extent D. To a small extent E. Not at all
OC 4.		OC 10. Do people who work here "goof off" if
Openness	To what extent does cooperation exist between departments at this Center?  A. To a very great extent	rps A. Almost no one "goofs off" B. A few "goof off" C. About half "goof off"
	B. To a great extent C. To some extent D. To a small extent E. Not at all	D. A lot "goof off"  E. Almost everyone "goofs off"  To what extent do you have to "toe the line" at this Center?
OC 5. Openness	To what extent does a cooperative atmosphere exists among people you work with?	<ul><li>A. To a very great extent</li><li>B. To a great extent</li><li>C. To some extent</li></ul>
	A. To a very great extent  B. To a great extent	D. To a small extent  E. Not at all
	C. To some extent  D. To a small extent  E. No: at all	C 12. How do you rate your job security in working for this PWC?
OC 6. Openness	How effective is your work center in overcoming unexpected problems?  A. Exceptionally resourceful B. More resourceful than most C. Usually overcomes difficulties D. Somewhat set back by obstacles E. Frequently stumped by obstacles	<ul> <li>A. Very secure</li> <li>B. Somewhat secure</li> <li>C. Don't know</li> <li>D. Somewhat insecure</li> <li>E. Very insecure</li> </ul>

OC Esprit	13.	To what extent is there an esprit GJC de corps (workgroup pride) among Job		The job itself is significant and important in the broader scheme of things.		
de Corps		A. To a very great extent B. To a great extent C. To some extent D. To a small extent E. Not at all		<ul> <li>A. Very descriptive of your job</li> <li>B. Descriptive of your job</li> <li>C. Somewhat descriptive</li> <li>D. A little descriptive of your job</li> <li>E. Not at all descriptive of your job</li> </ul>		
ос	14.	Which of the following is most important in getting promoted?	20.	job?		
		<ul><li>A. Seniority</li><li>B. Competence or ability</li><li>C. Personal relationships</li><li>D. The department you're in</li></ul>		<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>		
OC Esprit	15.	How would you describe this PWC?	21.	To what extent do you feel a very high degree of personal responsibility for the		
de Corps		<ul> <li>A. Very efficient</li> <li>B. Efficient</li> <li>C. Moderately efficient</li> <li>D. Not very efficient</li> <li>E. Totally inefficient</li> </ul>		work you do on this job?  A. To a very great extent B. To a great extent C. To some extent D. To a small extent		
ос	16.	This PWC is:		E. Not at all		
		<ul><li>A. Very up-to-date</li><li>B. Up-to-date</li><li>C. Moderately up-to-date</li><li>D. Old fashioned</li><li>E. Very old fashioned</li></ul>	22.	how well the job gets done.  A. To a very great extent B. To a great extent C. To some extent		
GJC	17.	The job denies me any chance to use my personal initiative or judg-		<ul><li>D. To a small extent</li><li>E. Not at all</li></ul>		
		ment in carrying out the work.  A. Very descriptive of your job	23.	To what extent do differences in language hinder getting the job done?		
GJC	18.	<ul> <li>A. Very descriptive of your job</li> <li>B. Descriptive of your job</li> <li>C. Somewhat descriptive</li> <li>D. A little descriptive</li> <li>E. Not at all descriptive of your job</li> <li>The job gives me considerable op-</li> </ul>		A. To a very great extent B. To a great extent C. To some extent D. To a small extent E. Not at all		
Job Challeng			<b>24</b> .	How safe is the equipment which is supplied to PWC employees?		
		<ul> <li>A. Very descriptive of your job</li> <li>B. Descriptive of your job</li> <li>C. Somewhate descriptive</li> <li>D. A little descriptive of your job</li> <li>E. Not at all descriptive of your job</li> </ul>		<ul> <li>A. Very safe</li> <li>B. Quite safe</li> <li>C. Moderately safe</li> <li>D. Unsafe</li> <li>E. Very unsafe</li> <li>F. Not sure</li> </ul>		

SJC <b>25</b> . Material	In general workers get the material and supplies they need to do the job.	SJC <b>30</b> . Material Waste	To what extent does damaged material delivered contribute to material waste in this PWC?		
	<ul><li>A. Strongly agree</li><li>B. Agree</li><li>C. Not sure</li><li>D. Disagree</li><li>E. Strongly disagree</li></ul>		<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>		
SJC <b>26</b> . Material	To what extent do people in the Material Department get the proper material to the job site?	SJC <b>31</b> . Material Waste	material delivered contribute to material waste in this PWC?  A. To a very great extent B. To a great extent C. To some extent D. To a small extent E. Not at all		
	<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> <li>F. Not sure</li> </ul>				
SJC <b>27</b> .	How much time do you think worker spend on the job waiting for material to arrive?	s SJC <b>32</b> . Material	F. Not sure  To what extent does theft contribute to material waste in this PWC?		
	<ul> <li>A. A great deal</li> <li>B. Quite a bit</li> <li>C. Some</li> <li>D. Little</li> <li>E. None</li> <li>F. Not sure</li> </ul>	Waste	<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> <li>F. Not sure</li> </ul>		
SJC 28. Material	How much material do you think is being wasted at PWC?	SJC 33. Material	To what extent does stockpiling of material (goldpiling) occur in this PWC?		
Waste	<ul> <li>A. A great deal</li> <li>B. Quite a bit</li> <li>C. Some</li> <li>D. Little</li> <li>E. None</li> <li>F. Not sure</li> </ul>	Waste	A. To a very great extent B. To a great extent C. To some extent D. To a small extent E. Not at all F. Not sure		
SJC <b>29</b> . Material Waste	To what extent do the procedures for turning materials back in contribute to material waste in this PWC?	SJC <b>34</b> . Material	How successful are workers in getting the material they need in a squeeze or emergency?		
	<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> <li>F. Not sure</li> </ul>		<ul> <li>A. Very successful</li> <li>B. Quite successful</li> <li>C. Somewhat successful</li> <li>D. Not very successful</li> <li>E. Not at all successful</li> <li>F. Not sure</li> </ul>		

Material Vehicles SJC 36.	Rate the transportation that this PWC uses on its safety.  A. Very safe B. Reasonably safe C. Not sure D. Slightly unsafe E. Very unsafe How frequently do workers experi-	SJC Manpowe Waste		How frequently are there more workers than needed to accomplish the work scheduled?  A. Very frequently B. Frequently C. Occasionally D. Seldom E. Almost never F. Not sure		
Vehicles	ence vehicle breakdown?  A. Very frequently B. Frequently C. Occasionally D. Seldom E. Almost never F. Not sure	SJC	42.	How frequently do you find that there is more work scheduled than can be accomplished as scheduled?  A. Very frequently B. Frequently C. Occasionally		
SJC 37. Vehicles	How much would better vehicles increase PWC productivity?  A. A great deal			<ul><li>D. Seldom</li><li>E. Almost never</li><li>F. Not sure</li></ul>		
	B. Quite a bit C. Some D. Little E. There would be no increase	SJC	43.	Our work center's workload is fairly constant from day to day.  A. Strongly agree B. Agree		
SJC 38. Material	F. Not sure  The vehicles provided are designed and/or equipped to do the job.	212		<ul><li>C. Not sure</li><li>D. Disagree</li><li>E. Strongly disagree</li></ul>		
	C. Not sure	SJC Manpower Waste	44.	being spent in nonproductive activity in the PWC?		
SJC 39.	D. Disagree E. Strongly disagree In general, when PWC employees use PWC vehicles they are treated with care.	•		<ul> <li>A. A great deal</li> <li>B. Quite a bit</li> <li>C. Some</li> <li>D. Little</li> <li>E. Very little</li> <li>F. Not sure</li> </ul>		
	<ul><li>A. Strongly agree</li><li>B. Agree</li><li>C. Not sure</li><li>D. Disagree</li></ul>		45.			
SJC 40. Manpower Waste	E. Strongly disagree  How frequently are there times when there isn't enough work to keep the workforce busy?	1		<ul><li>A. Material</li><li>B. Equipment</li><li>C. Transportation</li><li>D. Do not know</li></ul>		
	<ul><li>A. Very frequently</li><li>B. Frequently</li><li>C. Occasionally</li></ul>	SJC	46.	How much more do you think most people in your work center could produce if they wanted to?		
	D. Seldom E. Almost never F. Not sure			<ul> <li>A. A great deal more</li> <li>B. Quite a bit more</li> <li>C. Moderately more</li> <li>D. A little more</li> <li>E. People are producing as much as possible</li> </ul>		

The	If you think that there is time wasted at this PWC, list the major reasons you think cause this waste.  following group of questions deal with k. Please CIRCLE the letter in front o	. the persona	Il feelings you have about your day-to-day swer to each item.
1.	How important is your job to you compared with other interests in your life?  A. My job is much more important than my other interests.  B. My job is somewhat more important properties.		My pay is fair considering what other people in this organization are paid.  A. Strongly agree B. Agree C. Not sure D. Disagree
2	tant than my other interests.  C. My job is somewhat less important than my other interest.  D. My job is much less important than my other interests.	GJC 7. Pay & Fringe Benefits	<ul> <li>E. Strongly disagree</li> <li>My pay is fair considering what people in similar jobs in private industry are making.</li> <li>A. Strongly agree</li> <li>B. Agree</li> </ul>
2.	If I had the chance, I would take a different job within this organization.  A. Strongly agree B. Agree C. Not sure D. Disagree E. Strongly disagree	GJC <b>8</b> ,	C. Not sure D. Disagree E. Strongly disagree The fringe benefits for working at a PWC are better than one would get in private industry.
	I would like to look for a new job in the next year.  A. Definitely B. I might C. Not sure D. I doubt it E. Definitely not		<ul><li>A. Strongly agree</li><li>B. Agree</li><li>C. Not sure</li><li>D. Disagree</li><li>E. Strongly disagree</li></ul>
Reward Contingencie	<ul><li>B. Likely</li><li>C. Somewhat likely</li><li>D. Unlikely</li><li>E. Extremely unlikely</li></ul>		
<sub>GJC</sub> 5. Reward	How likely is it that a person who does a poor job will be reprimanded?		

Extremely likely

B. Likely
C. Somewhat likely
D. Untikely
E. Extremely unlikely

Reward ContingenciesA.

			great extent (A)	great extent (B)	extent (C)	extent (D)	Not at all (E)			
	and	what extent do management the local workforce agree on following issues:	(CIRC	CLE one le	tter on each lir	ne for your	answer)			
oc	9.	Supervisory practices	Α	В	С	D	E			
Work-	10.	Problems facing this PWC	Α	В	С	D	E			
force/	11.	Individual value systems	Α	В	С	D	E			
Manage-	12.	The way the world is viewed	Α	В	С	D	E			
Agree-	13.	The way people are viewed	А	В	С	D	E			
ment	From the following list, please WRITE in the spaces provided the three MOST IMPORTANT and three LEAST IMPORTANT items in terms of their importance to you on your job.									
	14	Most Important		^	Donnast fram	oou orkore				
					Respect from Feeling of acc					
				- c	C. Pay  D. Chances for getting ahead					
***				U.			nd			
JV		Least Important			Job security Opportunity to develop your skills					
				G.	Recognition Seeing the results of your work Having a job you don't take home					
	19.			_ 1.						
JS Intrinsio		How satisfied are you with the respect you receive from the pyou work with?  A. Very satisfied B. Satisified C. Neither satisfied nor diss D. Dissatisfied E. Very dissatisfied	people Ext	JS 23. crinsic	A. Very sat B. Satisfied C. Neither D. Dissatisf E. Very dis	ead in this isified satisfied no ied satisfied	or dissatisfied			
JS Intrinsio	21.		ie	rinsic	How satisfied are you with the amount of job security you have?  A. Very satisfied B. Satisfied C. Neither satisfied nor dissatisfied	?				
		<ul><li>B. Satisfied</li><li>C. Neither satisfied nor diss</li><li>D. Dissatisified</li></ul>	atisfied	JS <b>25</b> .	<ul><li>D. Dissatisf</li><li>E. Very diss</li></ul>	ied satisfied	with the opportunity			
		E. Very dissatisfied		rinsic	to develop yo					
JS Extrinsio	22.	How satisified are you with the amount of pay you get?  A. Very satisfied B. Satisfied C. Neither satisfied nor dissed D. Dissatisified E. Very dissatisfied			<ul><li>A. Very satis</li><li>B. Satisfied</li><li>C. Neither s</li><li>D. Dissatisfied</li><li>E. Very diss</li></ul>	satisfied no ied	r dissatisfied			

To a very

great

To a

great

To some

Toa

small

Not at

JS 26. Intrinsic	How satisfied are you with recognition for doing the job?  Ambiguity	32.	To what extent do you know if your work will be acceptable to your boss?
	<ul> <li>A. Very satisfied</li> <li>B. Satisfied</li> <li>C. Neither satisfied nor dissatisfied</li> <li>D. Dissatisfied</li> <li>E. Very dissatisfied</li> </ul>		<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>
JS 27. Intrinsic	How satisfied are you with seeing RS 3 the results from your work? Conflict	33.	To what extent is it difficult to satisfy everybody at the same time?
	<ul> <li>A. Very satisfied</li> <li>B. Satisfied</li> <li>C. Neither satisfied nor dissatisfied</li> <li>D. Dissatisfied</li> <li>E. Very dissatisfied</li> </ul>		<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>
JS <b>28</b> .	How satisfied are you with having RS 3 a job you don't take home? Conflict	34.	To what extent do you have to break rules to get everything done on your job?
	<ul> <li>A. Very satisfied</li> <li>B. Satisfied</li> <li>C. Neither satisfied nor dissatisfied</li> <li>D. Dissatisfied</li> <li>E. Very dissatisfied</li> </ul>		<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>
RS 29. Conflict	F. I do take work home RS 3 To what extent do you work under Conflict conflicting policies and guidelines?	35.	To what extent do people ask you to do things on your job which get in the way of your work?
	<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>		<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>
RS 30.	assignments without the manpower		To what extent do you feel certain about how much authority you have?
	A. To a very great extent B. To a great extent C. To some extent D. To a small extent		<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>
	To what extent do you do things Ambiguity		To what extent do you know what your responsibilities are?
Conflict	that are likely to be accepted by one person and not accepted by others?  A. To a very great extent B. To a great extent C. To some extent D. To a small extent E. Not at all		<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>

RS Ambiguity	38.	To what extent do you feel certain about how you will be evaluated for Ambigaraise or promotion?		To what extent are you given enough time to do what is expected of you on your job?				
		<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>		<ul><li>A. To a very great extent</li><li>B. To a great extent</li><li>C. To some extent</li><li>D. To a small extent</li><li>E. Not at all</li></ul>				
RS Ambiguity	39.	To what extent do you know exactly what is expected of you?		To what extent does it seem like you have too much work for one person to do?				
		<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>		<ul><li>A. To a very great extent</li><li>B. To a great extent</li><li>C. To some extent</li><li>D. To a small extent</li><li>E. Not at all</li></ul>				
RS Ambiguity	40.	To what extent do you know that you have divided your time properly?	44.	To what extent are the performance standards on your job too high?				
		<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>		<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>				
RS Ambiguity	41.	To what extent are explanations clear about what has to be done?						
		<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>						
	Each of the next four questions is followed by five answer spaces. Please WRITE your answers in the spaces provided for each question.							
	1.	What are some of the specific things which working?	occur a	t work that make you feel good about				
		A						
		В						
		C						
		D						
		E						

A	
В	
_	
C. <b>_</b>	
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ife b	u had <u>your</u> way and could do anything, what things would you do to make your work petter?
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rod	had your way and could do anything, what things would you do to improve the uctivity of this PWC?
۱. –	
_	
3. <u> </u>	
3 3 2	
3 3 2	

## Please CIRCLE the letter in front of the best answer for each item.

ОС	1	Overall, what effect do unions have on the PWC operation?	6.	To what extent is the "command interest" category abused?		
		<ul><li>A. Very positive</li><li>B. Positive</li><li>C. No effect</li><li>D. Negative</li><li>E. Very negative</li><li>F. No opinion</li></ul>		<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> <li>F. Do not know</li> </ul>		
OC Problems	2,	To what extent does employee theft present a problem at your PW A. To a very great extent B. To a great extent C. To some extent	C? 7.	To what extent does work on "command interest" jobs interfere with everyday work accomplishments?  A. To a very great extent		
		D. To a small extent  E. Not at all		<ul><li>B. To a great extent</li><li>C. To some extent</li><li>D. To a small extent</li></ul>		
OC Problems	3.	To what extent do you think there are problems between people of different ethnic backgrounds in	oc 8.	E. Not at all F. Do not know		
		your work center?	oc 6.	What effect does military turnover have on the effectiveness of this PWC?		
oc		A. To a very great extent B. To a great extent C. To some extent D. To a small extent E. Not at all		<ul> <li>A. Very positive</li> <li>B. Positive</li> <li>C. No effect either way</li> <li>D. Negative</li> <li>E. Very negative</li> <li>F. Do not know</li> </ul>		
Problems	4.	To what extent do problems between people of different ethnic background hurt your work center's performance.	nds OC 9. e? Percep-	F. Do not know  What effect does military management have on vertical communications both up		
		<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>	tions of Militar Management	and down?		
	5.	In what way do you think "comman interest" jobs affect productivity at this PWC?	d	<ul><li>D. Communications are hampered slightly</li><li>E. Communications are hampered</li></ul>		
		E. Greatly decrease productivity	OC 10. Perceptions of Military Management	yA. Very high		

OC 11. Perceptions of Military	toward the military is:  A. Very high	Perception of Milita		ns management as being necessary for the			
Management  OC 12.	B. High C. Neutral D. Low E. Very low Overall, rate military managemen	Managemen	nt	<ul><li>B. To a gr</li><li>C. To som</li></ul>	ery great e eat extent ne extent nall extent all		
Perceptions of Military	in terms of their ability to deal with personnel matters.	ос	15.	In general, n PWC like to			k for this
Management	<ul><li>A. Very good</li><li>B. Good</li><li>C. Fair</li><li>D. Poor</li><li>E. Very poor</li></ul>			<ul> <li>A. Almost always</li> <li>B. Often</li> <li>C. Sometimes</li> <li>D. Rarely</li> <li>E. Never</li> <li>In general, overtime is distributed fairly among employees.</li> </ul>			
oc 13.	F. No opinion  Overall, rate the military manager		16.				
Perceptions of Military Management	in terms of their financial management skills.  A. Very good B. Good C. Fair D. Poor E. Very poor	+		A. Almost B. Often C. Sometin D. Rarely E. Never			
		E	17.	In general, ra of how well			in terms
	F. No opinion			A. Very go B. Good C. Fair D. Poor E. Very po	ood		
			Very Good (A)		Fair (C)	Poor (D)	Very Poor (E)
	your work center in terms of how es in the following areas:	well	(Circ	<u>le</u> one letter	on each lir	ne for your	answer)
18.	Productivity – amount and qualit accomplished for money and time		А	В	С	D	E
19. E	Responsiveness – ability of PWC tand complete work quickly.		Α	В	С	D	E
	Adaptability — ability to meet chaconditions and demands.	anging	А	В	С	D	E
21.	Customer Satisfaction — extent to customers are satisfied with PWC in		Α	В	С	D	E

mance.

## The following group of items deal with your feelings about life in general. Please CIRCLE the letter in front of the best answer for each item.

- 1. Obedience and respect for authority.
  - A. Very important
  - B. Important
  - C. Somewhat important
  - D. Slightly important
  - E. Not at all important
- 2. Working hard to improve the prestige and status of one's group.
  - A. Very important
  - B. Important
  - C. Somewhat important
  - D. Slightly important
  - E. Not at all important
- Getting recognition for one's achievements.
  - A. Very important
  - B. Important
  - C. Somewhat important
  - D. Slightly important
  - E. Not at all important
- Prestige. To become well-known to obtain recognition, awards or high social status.
  - A. Very important
  - B. Important
  - C. Somewhat important
  - D. Slightly important
  - E. Not at all important
- Wealth. To earn a great deal of money.
  - A. Very important
  - B. Important
  - C. Somewhat important
  - D. Slightly important
  - E. Not at all important
- Security. To achieve a secure and stable position in work and financial situation.
  - A. Very important
  - B. Important
  - C. Somewhat important
  - D. Slightly important
  - E. Not at all important

- Self-realization. To get the most from one's personal development.
  - A. Very important
  - B. Important
  - C. Somewhat important
  - D. Slightly important
  - E. Not at all important
- 8. <u>Duty</u>. To dedicate oneself totally to ideals and principles.
  - A. Very important
  - B. Important
  - C. Somewhat important
  - D. Slightly important
  - E. Not at all important
- 9. <u>Pleasure.</u> To enjoy life, to be happy and content, to have the good things in life.
  - A. Very important
  - B. Important
  - C. Somewhat important
  - D. Slightly important
  - E. Not at all important

## From the following list, please WRITE in the space provided the four MOST IMPORTANT and four LEAST IMPORTANT things for a person to be.

Most Important

	10				A.		oitious
	11				В.		n-minded
					C.	Capa	
					D.		giving
	13				E.	Help	
CV		Least Important			F.	Che	
CV	11				G.	Clea	
					Н.		rageous
	15				1.	Hon	
	16				J.		ependent
	17				K.		disciplined
	17				L.		lligent
					M.	Lovi	
					N.		dient
					0.		ponsible
					Р.	Polit	te
	Plea	se CI	RCLE the letter in front of t	the best answ	er to	each	question.
MP			you encouraged to participa		5.		d ideas don't get communicated upward
Flow of			ecisions that affect you?	Flow of	•		use top management is not very
Communi-		A.	To a very great extent	Communi-			oachable.
cations		В.	To a great extent	cations		A.	Strongly agree
		C.	To some extent			А. В.	Agree
		D.	To a small extent			C.	Not sure
		E.	Not at all			D.	Disagree
						E.	Strongly disagree
MP	2.		e people are given special				
		priv	leges.	MP	6.		frequently are suggestions made
		A.	To a very great extent	Flow of		to to	pp management?
		В.	To a great extent	Communi-		A.	Very frequently
		C.	To some extent	cations		B.	Frequently
		D.	To a small extent			C.	Occasionally
		E.	Not at all			D.	Seldom
MP	3.	Whe	n things go wrong it is the			E.	Almost never
Derogatio			kers who are usually blamed	MP	7	Suga	estions made to top management
of Worker		A.	Strongly agree	Flow of			ve fair evaluation.
		В.	Agree	Communi-			
		о. С.	Not sure	cations			Almost always Often
		D.	Disagree				
		E.	Strongly agree			/march	Sometimes
						D. E.	Rarely
110	4.		rmation is withheld from wo			⊏.	Never
Derogatio			though it is readily available d help.	e and			
of Worker	S						
		A.	Almost always				
		В.	Often				
		C.	Sometimes				
		D.	Rarely				
		E.	Never				

MP 8. Flow of Communications	Management and supervisors set up interrelated jobs and work activities so that the work flows smoothly.		How often do job changes requested by customers cause unnecessary hardship on the efficiency of PWC?
	<ul><li>A. Strongly agree</li><li>B. Agree</li><li>C. Not sure</li><li>D. Disagree</li><li>E. Strongly disagree</li></ul>		<ul><li>A. Almost always</li><li>B. Often</li><li>C. Sometimes</li><li>D. Rarely</li><li>E. Never</li></ul>
MP 9. Supervision Bypassed	Workers are given direct orders by someone other than immediate supervisors.	15.	To what extent does management demand detailed information from people at lower levels?
	<ul><li>A. Almost always</li><li>B. Often</li><li>C. Sometimes</li><li>D. Rarely</li><li>E. Never</li></ul>		<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>
MP 10. Supervision	Management bypasses levels below them in assigning work.	MP 16. Flow of	Communications flow both up and down.
Bypassed	<ul><li>A. Almost always</li><li>B. Often</li><li>C. Sometimes</li><li>D. Rarely</li><li>E. Never</li></ul>	Communica- tions	<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> </ul>
MP 11. Flow of Communica- tions	Top management is interested in ideas and suggestions from people at different levels in the organization A. Almost always	Communica-	Written documents (such as budgets, schedules, project specifications, procedures, or program plans) are used as an important part of the job.
	<ul><li>B. Often</li><li>C. Sometimes</li><li>D. Rarely</li><li>E. Never</li></ul>	tions	<ul><li>A. Strongly agree</li><li>B. Agree</li><li>C. Not sure</li><li>D. Disagree</li></ul>
MP 12. Flow of Communica-	When problems are encountered those in authority make prompt decisions or recommendations.	MF 18. Perfor-	E. Strongly disagree Performance appraisals are based on written performances standards or
tions	<ul><li>A. Almost always</li><li>B. Often</li><li>C. Sometimes</li><li>D. Rarely</li><li>E. Never</li></ul>	mance Standards MP 19. Perfor-	criteria.  A. Yes B. No  Standards of performance and control
	In general, how would you rate the customer's understanding of how the PWC operates?	mance	systems have been established in writing.  A. Yes  B. No
	A. Very good B. Good C. Fair D. Poor E. Very poor F. Do not know		

Flow of Communica	a-	their subordinates develop their skills and abilities.					backlogs by submitting a series of minors instead of a single specific job.					
tions		A. B. C. D. E.	To a very great extent To a great extent To some extent To a small extent Not at all			A. B. C. D. E. F.	To a g To sor		nt			
				To a very great extent (A)	To a great extent (B)		o some xtent (C)	To a small extent (D)	Not at all (E)	Don't know (F)		
ch		nges i	extent could job nitiated by the be avoided if:	( <u>Circle</u> one letter on each line for your answer.)								
	22.	bett	omers provided a er description of work.	Α	В		С	D	E	F		
	23.		omers didn't change minds so often.	Α	В		С	D	E	F		
	24.	custo	agement would teach omers about the coperation.	Α	В		С	D	E	F		
	25.	com	e was better munication between omers and planning.	А	В		С	D	E	F		
	26.	work	what extent is the qualit c performed by contracter than that of PWC?		28.	3. To what extent are contractors evaluated on the same standards of performance as PWCs?				evaluated mance as		
		C. D. E.	To a very great extent To a great extent To some extent To a small extent Not at all No opinion			A. B. C. D. E. F.	To a gre To som		t			
	27.	of a c	ends up having to redo contractor's job.	much	29.	in th	e impler			een helpful stems and		
		B. C. D. E.	Almost always Often Sometimes Rarely Never Don't know			A. B. C. D. E. F.	To a great					

21. To what extent do customers avoid

MP 20. Supervisors are rewarded for helping their subordinates develop their

30.	To what extent are PWC personnel involved in the development of systems and procedures implemented by NAVFAC?	32.	To what extent do contractors provide a quicker response time to customers than PWC?  A. To a very great extent				
	<ul> <li>A. To a very great extent</li> <li>B. To a great extent</li> <li>C. To some extent</li> <li>D. To a small extent</li> <li>E. Not at all</li> <li>F. Do not know</li> </ul>		B. To a great extent C. To some extent D. To a small extent E. Not at all F. Do not know				
31.	Contracting out jobs is more cost- effective than performing them in-house.						
	<ul> <li>A. Strongly agree</li> <li>B. Agree</li> <li>C. Not sure</li> <li>D. Disagree</li> <li>E. Strongly disagree</li> <li>F. Do not know</li> </ul>						
	e answer the following three questions						
1.	<ul> <li>How productive are the meetings in ter</li> <li>A. Very productive</li> <li>B. Somewhat productive</li> <li>C. Somewhat unproductive</li> <li>D. A total waste of time</li> </ul>	ms of resol	ving problems?				
2.	Of the regular meetings you attend, list	those that	have value.				
3.	List those meetings that are not worth a	attending.					
-							
4.	Are you able to obtain from other work centers the information you need in order to carry out your duties?	5.	In general, how would you characterize the relationship between the divisions within your code (department)?  A. Excellent				
	A. Very often B. Often C. Sometimes D. Infrequently E. Never		B. Very good C. Average D. Below average E. Very poor				

	is generally provided to the P&Es by:								
	<ul><li>A. ACEs or SCEs</li><li>B. Customers</li><li>C. Both</li></ul>								
		Great deal (A)	Good deal (B)	Somewhat (C)	Not at all (D)	Not involved in my work (E)			
cod	what extent are the following es (departments) helpful to in getting your work done?	(CIRC	(CIRCLE the letter on each line for your answer.)						
9.	110 - Activity Civil Engineer Office	Α	В	С	D	E			
10.	130 - Management Office	Α	В	С	D	E			
11.	140 - Civilian Personnel Office	Α	В	С	D	E			
12.	150 - Comptroller Office	Α	В	С	D	E			
13.	160 - Housing Office	Α	В	С	D	E			
14.	200 - Engineering Department	Α	В	С	D	E			
15.	300 - Maintenance Control Department	Α	В	С	D	E			
16.	500 · Maintenance Department	Α	В	С	D	E			
17.	600 - Utilities Department	Α	В	С	D	E			
18.	700 - Transportation Department	Α	В	С	D	E			
19.	800 - Material Department	А	В	С	D	E			
20.	If you have difficulty working with anot	her work	center,	name it and I	ist the rea	sons.			

8.

A.

В.

C.

D.

E.

To what extent is productivity in your

failure to communicate?

To some extent

Not at all

To a small extent

To a very great extent
To a great extent

work group affected by other departments

6. To what extent do ACEs or SCEs

A. To a very great extent

To a great extent

To a small extent

7. A description of the job to be done

To some extent

Not at all

work.

B. C.

D.

E.

(staff civils) provide useful informa-

tion to the P&Es concerning new

2		21.	. Ho	w much information have eived on PMS procedure	ve you es?	23.		<ul><li>Do you think workers understand PMS?</li><li>A. To a very great extent</li></ul>					
				A. B. C. D. E.	A great deal Quite a bit Some A little None				A. B. C. D. E. F.	To a To so To a Not a	great exter ome extent small exter	nt	
			22.	Ho	w familiar are you with	PMS?							
				A. B. C. D. E.	Very familiar Familiar Somewhat familiar Not very familiar Never heard of it								
						To a grea exte	nt	To a great extent (B)			To a small extent (D)	Not at all (E)	Does not apply (F)
			at th	nis PV	as been implemented VC, to what extent proved the:						e for your		(,,
			24.	Plan	ining of work	A		В	(		D	E	F
MP			25.	Sch	eduling of work	Д		В	(		D	E	F
PM	S		26.	Coo	rdinating various C functions	Д		В	C		D	E	F
		-	27.		rall efficiency of k accomplishment	А		В	C		D	E	F
		MP	28.	In g	eneral, PMS has:		MP	•••	Tow	hat ex	tent is pres	sure appli	ed to avoid
	Repo Syst	orti em	ng	A.	Created more work tha	n it has	Repor Syste	ting	the u	ise of c	overhead or	iobs?	
				B. C.	saved Saved work Had no effect on the ar of work Don't know	nount	byste		B. C. D.	To a g To sor	ery great e reat extent me extent mall extent all		
	Repo Syst	MP ortin em	29. 1g	tion	eneral, the necessary info is provided so the report ems can operate effective	ting	MP		To w	Don't	tent do you	think the	reporting
				A. B. C. D. E.	To a very great extent To a great extent To some extent To a small extent Not at all Don't know	ay.	Repor System	m.	what A. B. C. D. E.	is actu To a ve To a gr To son To a sr Not at	this PWC active and the control of t	place on to	eflect the job?

32.	How often do you see employe this PWC do things on the job t seem contrary to common sens	hat e,	The refl		
	just to fulfill the requirements a reporting system?	of	A.	Almost always	
			В.	Often	
	A. Very frequently		C.	Sometimes	
	V. Frequently C. Occasionally		D. E.	Rarely Almost never	
	D. Seldom		С.	Almost never	
	E. Almost never				
24	List the reports by name or nu	mbar that you doa	المنابد	on your ich Indicate how	usoful
34.	they are by checking the appro		ı wıtı	i on your job. Indicate now t	userui
		Useful the		Should be	Should be
		way it is		modified	eliminated
		(A)		(B)	(C)
					T
					-
		<del></del>			
35.	How often do P&Es plan and estimate jobs within their own	37		general, P&Es are trained to on rk required of them.	do the
	trade?		A.	Strongly agree	
	A. Very frequently		В.	Agree	
	B. Frequently		C.	Not sure	
	C. Not sure		D.	Disagree	
	D. Seldom		E.	Strongly disagree	
	<ul><li>E. Almost never</li></ul>	38	. Is t	he ratio of P&E hours to pro	ductive
36.	To what extent do P&Es know			urs set by NAVFAC realistic?	
	the latest developments in their	r	A.	Yes	
	field?		В.	No	
	A. To a very great extent		C.	Not sure	
	B. To a great extent				
	C. To some extent				
	D. To a small extent				
	E. Not at all				
	F. Don't know				

cha wha resu	ite often there are nges in the job. To at extent is this a alt of:	To a very great extent (A)	To a great extent (B)	To some extent (C)	To a small extent (D)	Not at all (E) our answer.	Don't know (F)
39.	A customer changing his mind	Α	В	С	D	Ε	F
40.	Poor planning and estimating	А	В	С	D	E	F
41.	Poor job description from ACE	Α	В	С	D	Ε	F
42.	A fact of life due to the nature of rehabil- itative construction work	Α	В	С	D	E	F
43.	Poor quality of work	А	В	С	D	E	F
<b>45.</b>	Where do you think the joshould be developed?  A. In Planning and Estir B. In the Maintenance Department C. Not sure  How often should a P&E giob site and see what needed done?  A. Very frequently B. Frequently C. Not sure D. Seldom E. Almost never  How often do P&Es visit the	o to the	49	A. Exce B. Very C. Fair D. Poor E. Very F. Do n To what e in getting A. To a B. To a C. To so	poor ot know xtent are t the work of very great great extent ime extent small exter	he job plar lone? extent	ers?
47. T	A. Very frequently B. Frequently C. Not sure C. Seldom C. Almost never The P&Es do all they can to tes but are too overworked to as many as they should to sure C. Agree Not sure Disagree	visit job		To what exare set up r A. To a v B. To a g C. To sor D. To a si E. Not at F. Not su Should the s shops or cer A. In the	reat the watery great extended extent mall extendall reschedulers attrally located	ork require extent t t	ed?

- 52. When people from the different departments work together to complete a job, the work activities are well planned.
  - A. Strongly agree
  - Agree В.
  - C. Not sure

  - D. DisagreeE. Strongly disagree

				A great	Quite	Some-			
				deal	a lot	thing	Little	Nothing	
				(A)	(B)	(C)	(D)	(E)	
			v much <u>do</u> you as a supervisor e to say in making decisions ut:	(CIRCLE o	one letter	on each lir	ne for your	answer.)	
		53.	How you do your work	Α	В	С	D	E	
	Task .	54.	Scheduling your work activities	Α	В	С	D	E	
		55.	How to handle problems you face in your work	Α	В	С	D	E	
		56.	Hiring of people	Α	В	С	D	E	
	D	57.	Pay raises	Α	В	С	D	E	
SI	Per-	58.	Firing people	Α	В	С	D	E	
	nel	59.	Promoting people	Α	В	С	D	E	
		60.	When people take time off	Α	В	С	D	Ε .	
	Task	61.	What you should do when some- thing unexpected happens	Α	В	С	, D ·	E	
		62.	Settling disagreements	Α	В	С	D	E	
	-			A great extent (A)	Quite a lot (B)	Some (C)	Little (D)	Nothing (E)	
		supe	v much say <u>should</u> you as a ervisor have in making sions about:	(CIRCLE one letter on each line for your answer.)					
		63.	How you do your work	А	В	С	D	E	
		64.	Scheduling your work activities	Α	В	С	D	E	
		65.	How to handle problems you face in your work	Α	В	С	D	E	
	SI	66.	Hiring people	Α	В	С	D	E	
	51	67.	Pay raises	Α	В	С	D	E	
		68.	Firing people	Α	В	С	D	E	
		69.	Promoting people	(A	В	С	D	E	
		70.	When people take time off	Α	В	С	D	E	
		71.	What you should do when something unexpected happens	А	В	С	D	E	
		72.	Settling disagreements	Α	В	С	D	E	

MP Performand Standards		To what extent standards establ subordinate's jo			76.	in n	what extent do wonaking important heir work?		
		A. To a very of B. To a great C. To some e. D. To a small E. Not at all	xtent			A. B. C. D. E.	To a very great of To a great extent To some extent To a small extent Not at all	t	
	74.	To what extent ratings measure subordinates do	how well your		77.	have	his Center, people e complete and ac		
			great extent extent ktent			A. B. C. D. E.	Always Many times Usually Sometimes Rarely		
MP 75. In this PWC, to what ex threats and punishments a way to get people to deter work?			ishments used as						
		<ul><li>A. To a very g</li><li>B. To a great</li><li>C. To some ex</li><li>D. To a small</li><li>E. Not at all</li></ul>	ktent						
			A very great deal of influence (A)	Quite a lot of influence (B)	1000	ome fluen (C)	Little nce influence (D)	Very little influence (E)	Not Sure (F)
do t grou actu wha		much influence ne following ps or persons ally have on happens in Center?			letter		each line for your		( )
	78.	Navy managers	Α	В		C	D	E	F
	79.	Civilian managers	А	В		С	D	E	F
	80.	Supervisors	Α	В		С	D	E	F
	81.	The workers	Α	В		С	D	E	F
	82. To what extent are responsibilities carr as defined by the p description?		arried out	ed out			, 3		
		A. To a very g B. To a great e C. To some ex D. To a small e E. Not at all	extent tent			C. D. E.	To some extent To a small extent Not at all		

MP 84. Proper Channels Followed	To what extent is the formal chai of command followed in decision making processes?  A. Almost always B. Often C. Sometimes D. Seldom E. Almost never  There are standardized procedures for training supervisory personnel.	Proper Channels Followed	To what extent is going through proper channels required?  A. To a very great extent B. To a great extent C. To some extent D. To a small extent E. Not at all  To what extent do even small matters have to be referred to someone higher up for a final decision?
	<ul><li>A. Strongly agree</li><li>B. Agree</li><li>C. Not sure</li><li>D. Disagree</li><li>E. Strongly disagree</li></ul>	MP Derogation of Worker	A. To a very great extent B. To a great extent C. To some extent D. To a small extent E. Not at all

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